

Threats to Leaders' Political Survival and Pro-Government Militia Formation

Konstantin Ash *

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Abstract

It is puzzling why leaders delegate authority to pro-government militias (PGMs) at the expense of professional armed forces. Several state-level explanations, ranging from low state capacity to blame evasion for human rights violations have been proposed for the establishment of PGM linkages. These explanations lack focus on the individuals making decisions to form PGMs: national leaders. It is argued that leaders create linkages with PGMs to facilitate leaders' political survival in the event of their deposition. Threats to leaders' survival come from the military, foreign powers or domestic actors outside the ruling coalition. As costs of leader deposition are low for the state, leaders facing threats from one or all of these sources must invest in protection from outside of the security apparatus. The argument is tested through data on PGM linkage formation and threats to political survival. Results show that leaders under coup threat are more likely to form PGM linkages, while threats from foreign actors make leaders particularly more likely to form linkages with ethnic or religious PGMs. The findings strongly suggest that PGM linkage formation is driven by leader-level desire for political survival, rather a host of state-level explanations.

*PhD Candidate in Political Science at the University of California - San Diego. E-mail: kash@ucsd.edu

Introduction

From news of the fearsome Fedayeen Saddam in the run-up to the 2003 US invasion of Iraq, to massacres by the Hutu-dominated Interahamwe during the Rwandan Genocide and the recent prominence of the pro-Assad Shabiha in the Syrian Civil War, pro-government militias (PGMs) have become a regular feature of armed internal conflict around the world. Beyond civil conflicts, these pro-government or government-sponsored¹ armed organizations outside of the security forces (Carey et al., 2013) are also peacetime collaborators of many governments. The existence and prevalence of pro-government militias create tension with a state's desire to maintain a monopoly over the use of force (Herbst, 2000) as PGMs are not professional armed forces and often suffer lapses in accountability or professionalism. It is thus puzzling why states choose to empower armed groups outside of the security apparatus that do not have the capabilities of traditional armed forces.

The puzzle central to this article is similar to those in recent quantitative and qualitative articles on pro-government militias and consistent with the question posed by Carey et al. (2015a,b) in their pioneering empirical work. Nevertheless, while this research has shed considerable light on PGMs, it has also largely emphasized three state-level predictors: state capacity, rebel defection and international donor pressure, at the cost of considering predictors related to national leaders. Most basically, the formation of linkages between pro-government militias and the state has been attributed to the erosion of a state's monopoly over the use of force within its territory.² It is argued that militias gain influence when governments are incapable of using their formal security forces

¹It should be noted that the 'pro-government' distinction isolates these groups from the general presence of militias in a country, which can range from pro- to neutral to anti-government armed groups (Staniland, 2015).

²Known as weak state capacity. Also defined as deficiency in either universal authority or undisputed regulatory control within their borders (Krasner, 2004) and the failure to provide basic public goods to a state's citizens (Rotberg, 2004).

to quell rebellion (Bates, 2008; Reno, 2002). Following from state weakness, the formation of pro-government militias also appears strongly tied to the risk of civil conflict (Carey et al., 2015a), with this empirical relationship established using state-level predictors of civil war associated with state capacity by Fearon and Laitin (2003). Specific cases of PGM formation provide for a more concrete linkage to conflict. For instance, some PGMs have evolved from defecting rebel groups that join the government after having participated in an anti-government insurgency. This defection can either be attributed to government efforts to splinter rebel groups (Kydd and Walter, 2002) or insurgent-led defections as a result of hard-line policies on the part of one faction against others (Staniland, 2012). Finally, PGM linkage formation has most recently and prominently been explained as a means of evading blame for human rights violations from international donors. As Western aid to the developing world became increasingly conditional on democratic reforms or economic liberalization (Easterly, 2001), the resultant electoral competition, protests and civil violence led governments to create informal third party groups to repress opposition forces without jeopardizing foreign aid flows (Kirschke, 2000; Roessler, 2005). Empirical tests find support for this relationship, as Mitchell et al. (2014) show that human rights violations are more common in countries with PGM linkages and Carey et al. (2015b) find PGM linkages to be more frequent in countries that receive a larger proportion of aid to GDP from democracies and less frequent in those that receive a larger proportion of aid from autocracies.

Challenges can be made to each of the three explanatory threads. First, state capacity is difficult to precisely define (Hendrix, 2010), making the reasons for PGM formation in weak states unclear. Second, any application of the rebel defection explanation is limited to a small group of PGMs in countries experiencing civil wars. Finally, recent research has called the mechanisms underlying the role of blame evasion into question through findings that donor states often bypass

countries with weak governance capacity in aid deliveries, rather than cutting off aid altogether (Dietrich, 2013) and that PGMs are no more likely to use violence against civilians during civil conflict than regular armed forces (Stanton, 2015). More broadly, the state-based explanations for pro-government militia linkage formation do not seem to account for agency on the part of the principal that forms linkages with PGMs: the national leader.

State-oriented empirical strategies implicitly assume that governments and not leaders make the decision to form linkages with pro-government militias and consequently omit leader-specific predictors from any empirical analysis. There is a danger to such an approach as even the type of pro-government militias most associated with blame evasion, so-called ‘death squads’ or non-governmental community battalions that carry out extra-judicial operations against suspected rebels (Mason and Krane, 1989), could aid in ensuring a leader’s political survival if overthrown, as was the case with Nicaragua’s Contras. In fact, qualitative case evidence presented further in the article reveals that leaders often personally create linkages to pro-government militias, either by creating new groups or by forming accountability chains with existing armed actors. These leaders find it advantageous to outsource their security to actors that are loyal to them alone and rely less on militaries that may feel that their fate is not tied to a particular leader. It follows that leaders are more likely to rely on PGMs as a loyal force that will give them a greater opportunity to maintain political relevance after being overthrown when facing a distinct threat of foreign or domestic removal. Moreover, given that fortunes of leaders are often tied to their identity groups and identity groups are most likely to be displaced by threats external to the ruling coalition, leaders should be more likely to form linkages with ethnic or religiously-oriented PGMs when faced with challenges from either domestic challengers outside of the ruling coalition or from foreign sources. Thus,

by examining the factors that would drive leaders to form PGM linkages, the analysis is better positioned to provide a more complete explanation of PGM linkage formation.

The argument is presented in five sections. The first section frames the puzzle of PGM linkage formation in terms of civil-military relations, arguing that leaders of countries secure from foreign annexation divert resources from professional militaries due to threats of military coups, foreign occupation or domestic overthrow. The second section lays out the theory, integrating three cases of PGM linkages to illustrate the processes that drive leaders to establish links with or create PGMs. The following section describes the operationalization of the theoretical constructs and the statistical models used to test the relationships between the independent variables and PGM formation. The theoretical assertions are supported through a test of what determines when and if governments establish links to militias, rather than the overall presence of those links. The test is reinforced through additional models to explain the formation of ethnic or religious PGMs. In the following section, results show consistent support for the theoretical claims. Leaders in countries that recently experienced attempted coups are more likely to link to PGMs, while, within that subset, ethnic and religious PGM linkage formation is driven by the presence of non-supportive foreign armed forces. Not only do the results add an additional dimension to explaining PGM linkage formation, but bridge work on coup-proofing and paramilitaries with research on pro-government militias.

Pro-Government Militias and Civil-Military Relations

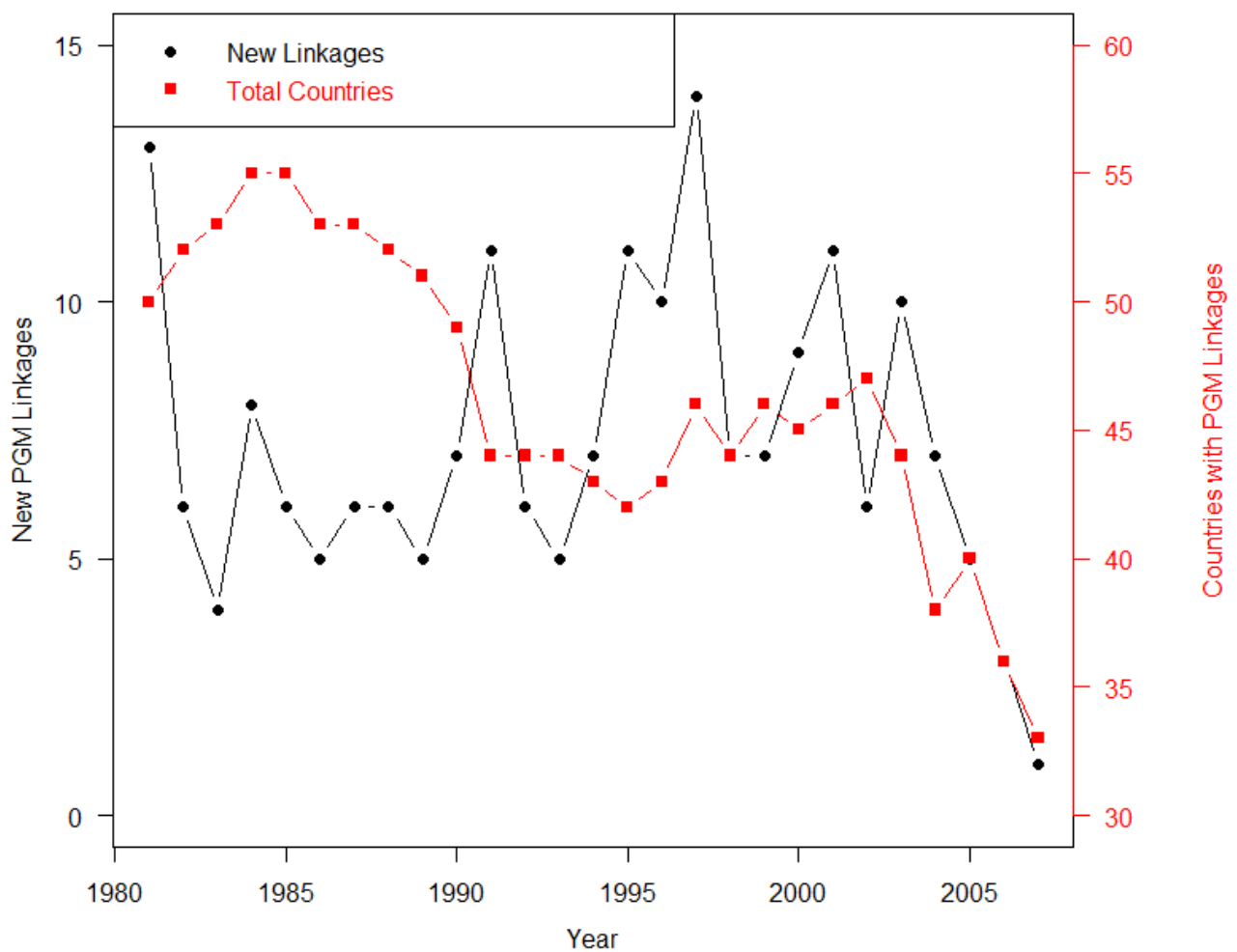
A leader-driven push for militia formation stands in contrast to a state-centric approach to the development of national military forces, which emphasizes a drive to professionalism. More pro-

professional militaries are better trained to deal with foreign threats and more likely to yield political control to civilian authorities (Weber, 1922). States that divert resources toward pro-government militias appear to sacrifice professionalism – said to be a goal of the modern nation-state – for some ulterior motive. However, the assumption that professionalism is the end-goal for all militaries is founded on the idea that governments face threats from primarily external actors, which is region-specific and out of date. The post-World War II norm against territorial conquest and annexation has largely left the integrity of the world's countries secure (Fazal, 2007; Herbst, 2000). Instead, international conflicts with the purpose of imposing regime change, rather than explicit annexation, are now far more common, although relatively rare in removing leaders from office compared to coup d'états – initiated by challengers from within a leader's ruling coalition – and rebellions – initiated by domestic challengers from outside of a leader's ruling coalition (Svolik and Akcinarogly, 2006). Moreover, most of the world's countries do not fit the mold of the wealthy, urbanized, democratic and relatively homogeneous states where professionalized militaries appear to concentrate (Toronto, 2015). In many developing countries, identity-based stratification across political and economic lines (Horowitz, 1985) and an outsized role of the military in politics, create threat environments where leaders find benefits from reducing military professionalism as way addressing threats that differ from those faced by European countries before World War II.

The change in threat environment is particularly salient to national leaders, who may struggle to find loyal agents for defense against challenges and, especially, against depositions. If territorial conquest is unlikely, agents of the state become less reliable as a leader's removal does not necessarily compromise their position within the state. For instance, it is rare that foreign imposed regime changes (FIRC) remove state agents to the extent of the de-Ba'athification that followed the United States' invasion of Iraq and deposition of Saddam Hussein. Most FIRC merely em-

power new leaders that are more ideologically proximate to the foreign power (Desch, 2008), as seen in French interventions in their former African colonies or U.S.-imposed regime change in Latin America, where leader removal often led to little more than cosmetic institutional change (Downes and Montan, 2013).

Figure 1: **PGM linkages for full coverage of data**



Using data on PGM linkages described later in the article from Carey et al. (2013) can reveal anecdotal evidence as to the role of threats to leader deposition in PGM linkage formation. Figure

1 shows the number of countries that had at least one PGM linkage and the number of new PGM linkages between 1981 and 2007. The trends reveal anecdotal evidence for the idea that threats to leaders play a role in pro-government militia linkage formation. More countries have linkages before the end of the Cold War, when there was a higher potential for either foreign deposition or a foreign-funded insurgent takeover. Individual linkages spike around years of political upheaval, such as 1991, corresponding to the fall of the Soviet Union and the late 1990s, corresponding to the beginning of the first and second Congo Wars and a revolution in Indonesia. The trends are less supportive of the blame evasion hypothesis as there is a decline in both new linkages and total countries with linkages since the 1980s. As Western donors began putting conditions of aid in earnest at the very end of the Cold War and after, one would expect an upward trend in both of these indicators following 1989. Given the apparent role of threats to leaders in diversion of resources from professional militaries, looking at existing work on civil-military relations may provide a foundation for a leader-based explanation of the phenomenon.

Paramilitaries and Coup Risk

While itself limited, past work on the role of paramilitary forces in reducing coup risk can provide a way forward in explaining PGM linkage formation. Paramilitary organizations include both national police forces and border guards along with militias and civilian defense organizations (Dowdle, 2007), allowing for some overlap with pro-government militias.³ There is a need for conceptual clarity: while most PGMs would be considered paramilitary organizations, only some paramilitary organizations are PGMs. For instance, national police forces, gendarmeries

³Although it is not clear which militias are included in the paramilitary data available from Belkin and Schofer (2003).

and border patrol, would be paramilitary forces, but remain within the scope of the government security apparatus and would not be considered PGMs. Thus, while not completely related to pro-government militias, findings on paramilitaries can provide insight into the potential motives for creating PGM linkages.

Paramilitaries are more prominent in militaries that experience a higher risk of coups (Belkin and Schofer, 2006), and conversely decrease the likelihood of coup attempts and coup attempt success (Powell, 2012). On a whole, paramilitaries are seen as part of government efforts to ‘coup-proof’ – a tactic employed by leaders facing risk of overthrow by a small group within the ruling coalition, especially within the military, to preserve their leadership. In general, leaders coup-proof by appointing members loyal to the regime through family, ethnic or religious ties to coup-critical positions in the military (known as stacking), by forming armed forces parallel to the military, developing security agencies to monitor the military, encouraging expertness or through direct financial transfers (Quinlivan, 1999).⁴ Given the presence of organizations within and outside the security apparatus in the definition of paramilitaries, evidence from these studies is not sufficient to make such a conclusion on the reasons for PGM formation as many paramilitary groups remain within the scope of the government security apparatus and fundamentally differ from PGMs. Nevertheless, the findings connecting paramilitary formation to leader-driven survival strategies imply a broader theory that PGM linkages are motivated by leaders’ desire for survival. This idea is elaborated in the next section.

⁴Institutionalized coup-proofing often comes at the cost of military performance (Pilster and Bohmelt, 2011).

PGM Linkage and Political Survival

This section outlines why the formation of linkages with pro-government militias, through either creating ties with existing armed groups outside of the security forces or creating altogether new armed groups, is a measure taken by leaders to ensure their survival in the face of a multitude of potential threats, ranging from military coups, removal by domestic actors outside of the winning coalition or foreign-imposed regime change. Interwoven throughout the section are examples from three cases: Ghana under Jerry Rawlings, Iraq under Saddam Hussein and the Republic of the Congo under Patrice Lissouba and Denis Sassou-Nguesso. Each case is designed to illustrate the mechanisms behind establishing PGM linkages as a leader's response to either internal or external threats. The cases are chosen to reflect both the geographic diversity of the phenomenon of PGM linkage formation and the variety in the threats faced by leaders.

It should be noted that, despite their benefits, PGMs face considerable drawbacks. Militia members may very well be extremely loyal to leaders, but not necessarily suited to perform the tasks of traditional armed forces. Foremost, PGMs are likely inferior to professional militaries in terms of actual fighting capacity and carrying out civilian assistance tasks that national armies are trained to handle. The groups may be composed of criminals, football hooligans, weightlifters⁵ or general societal outcasts who use their imposing physical stature or violent temperament to their advantage (Vasic and Svarm, 2001), but who are otherwise undisciplined and prone to looting and extra-judicial killings (Kukhianidze, 2009). Thus, the threats to leaders must be sufficiently great to warrant a trade-off between professionalism and loyalty.

⁵The case for many in the Shabiha (Alexander and Sherlock, 2012)

Broadly, leaders have several options for dealing with threats to their survival from either foreign forces, domestic forces outside of the ruling coalition or from challengers within the ruling coalition. Leaders facing foreign threats can strengthen the military, but can simultaneously increase coup risk, especially if the military does not perceive the external threat to be as great (McMahon and Slantchev, 2015). Autocratic leaders come under particular risk as they have considerable material benefits from holding office that both internal and external challengers may want to obtain (Bueno de Mesquita et al., 2003). As mentioned, leaders have a multitude of options for decreasing coup risk through tactics targeting the military itself. However, within-military coup proofing can backfire, as military leaders realize that measures are being taken to prevent their organization and subsequently become more likely to carry out a coup or to defect to outside challengers (Makara, 2013). Apart from coups, foreign or extra-coalitional overthrows generally do not directly threaten the military. In these cases, armed forces stand to lose little by the leader's removal. It follows that leaders face considerable challenges in extracting loyalty from security forces. Even ethnic or religious bonds to leaders may be dulled or negated by the indoctrination into supporting the nationalist idea of the state undergone by all military members, decreasing the salience of identity-based connections to leaders in members of the armed forces (Posen, 1993). Thus, a 'coup-proofed' military with units 'stacked' with members of a leader's identity group or special security forces created exclusively for a particular leader may still not be the most reliable force to ensure leaders are not deposed. Given their institutional bonds to the state, it is even more unlikely that members of the military would continue supporting a leader after that leader was overthrown.

Following the preceding paragraph, leaders must develop forces outside of the military to ensure that, if overthrown, they can continue to function as political actors. The case of Jerry

Rawlings exemplifies the benefits of such an approach in response to coup threat. Ghanaian Flight Lieutenant Jerry Rawlings took power in a coup in 1981, after overthrowing a military council that had, itself, taken power in a coup in 1979. Two further coup attempts against Rawlings took place in 1982 and 1983. While neither succeeded, the military continued to put up sporadic resistance to his rule and up to seven attempts to overthrow Rawlings followed during the rest of the 1980s (International Business Publications, 2012). In response, Rawlings formed paramilitary and civilian defense organizations that were directly accountable to him, rather than the military command structure, including the Committees for the Defense of the Revolution (CDR). The CDR, created shortly after Rawlings took power, were formed as civilian organizations, with many officers loyal to Rawlings as members, and had extra-judicial authority over dispute resolution (Immigration and Refugee Board of Canada, 1992). The committees allowed Rawlings to divide loyalties of his military forces so that even a successful military overthrow would leave Rawlings with a base of support outside of the military that could plausibly stage a counter-coup or rebellion to restore his rule.

Leaders facing threats from outside of their coalition still find PGMs useful in insuring their survival after deposition. For instance, in addition to the threat of an overthrow from within his inner circle, Saddam Hussein faced the threat of foreign deposition, eventually being deposed through a US-led invasion of Iraq in 2003.⁶ In the case of possible foreign imposed regime change, leaders will want to respond to foreign invaders with an irregular force to assure their survival,

⁶Hussein came to power in Iraq in 1979, and faced rebellions in the Kurdish North and Shia South in early 1991, following an invasion of Kuwait in 1990 turned into a disastrous military defeat at the hands of a US-led multilateral coalition. While the military's elite Revolutionary Guard put down the uprising in the South, multinational forces established no-fly zones in the North and South of the country, allowing Kurdish rebels to establish a quasi-state in the North. Moreover, in the years after the invasion, defections led to several aborted coup attempts, most notably by CIA-backed Wafiq Samarrai in 1994 (Smith and Ottaway, 1996).

especially if the military is largely left intact during the invasion.⁷ Accordingly, in 1995, the Fedayeen Saddam were set up under direction of Hussein's son, Uday, functioning entirely outside of the military command structure and recruiting its members through various degrees of coercion from Sunni tribes loyal to Hussein in areas surrounding Hussein's hometown of Tikrit (Danish Immigration Service, 2002). The Fedayeen played the role of Hussein's protector to perfection when Hussein was overthrown in 2003. The group had been structured much more like a guerrilla force than a military outfit, armed with automatic weapons, rocket-propelled grenades and truck-mounted assault weapons, mortars and artillery. In effect, the Fedayeen ceded resources from the offensive-minded Iraqi military to a far more defensive and informal structure (Otterman, 2003). While most units of the regular Iraqi Army, including the elite Republican Guard, quickly capitulated to superior U.S. firepower, the Fedayeen Saddam's special composition was instrumental in coordinating attacks against U.S. convoys on the road to Baghdad, hiding Hussein and eventually spring-boarding an insurgency against American occupation in the months after the invasion (Crandall, 2014).

Political actors outside of a leader's ruling coalition, especially those deposed by extra-constitutional means, are a third potential threat to a leader's rule. In many autocratic regimes there are likely to be politically excluded leaders that are constitutionally empowered to hold positions in government. In the eyes of at least some of the population, these leaders have a legitimate right to power.⁸ Since the military's collective feeling of obligation to the state could lead them to

⁷While the motivations for foreign imposed regime change (Werner, 1996) and the consequences of FIRC's (Downes and Monten, 2013) have been widely explored, the measures taken by target governments are largely undertheorized (with the possible exception of Goemans (2000)).

⁸ The outbreak or even presence of a civil conflict in a country need not represent a direct risk to leaders' positions. Many civil conflicts are secessionist in nature and do not seek to overthrow the central government. Others may not be an apparent threat to the leader in power due to a lack of capability (i.e. the Communist Party - Maoist (Naxalites) in India).

take the side of a constitutionally legitimate force against a particular leader, leaders would benefit from empowering a directly-accountable security force.⁹ Having removed a political alliance of elected president Patrice Lissouba and Bakongo leader Bernard Kolelas through an insurgency, Denis Sassou-Nguesso returned to the presidency of the Republic of the Congo in 1997. However, his rebel force, known as the Cobras, were not integrated into the military, transforming into a pro-government militia. Both Lissouba and Kolelas escaped the country unharmed and waged an insurgency against Sassou-Nguesso's government for two more years through their own pro-government militias-turned-insurgents, the Cocoyes and the Ninjas (Uppsala University Department of Peace and Conflict Research, 2013). Rather than trusting a military that he had just defeated in combat and could plausibly defect to the constitutionally legitimate political forces, Sassou-Nguesso opted for his former insurgent force to take the lead in combating challenges to his rule from outside of the ruling coalition.

In each of the three mentioned cases, it has not only been abundantly clear that PGMs play a role in addressing leaders' concern about being overthrown, but that that PGMs are specifically formed at the behest of leaders. Moreover, leaders are responsible for training, organizing and indoctrinating militias and the disbursement of payment, even if it is from state coffers (Chelapi-den Hamer, 2012). It follows that many PGMs are positioned more as arms of a leader rather than the state. PGMs allow leaders to either bypass potentially disloyal or ineffective armed forces without explicitly threatening the autonomy of the armed forces as an institution, or compensate for military capacity lost as a result of coup-proofing measures, such as military purges (Eck, 2015). Together, the assertion of a linkage between risk to political survival and linkages to pro-government militias

⁹This is underscored by work on civil-military relations which highlights militaries' agency from even democratically-elected leaders and tendency toward self-preservation (Feaver, 2005).

leads to a prediction about pro-government militia linkage formation. Fundamentally, the main assertion of the study is that:

Hypothesis 1 *Leaders that face threats to their political survival are more likely to form linkages with pro-government militias.*

In that facing specific threats provides leaders with incentives to create mechanisms that will ensure both their physical and political survival if they are overthrown from either within or outside of their winning coalitions.

The presence of an ethnically or religiously oriented PGM may be particularly beneficial to leaders facing certain threats, especially if their overthrow results in a loss of political influence for their ethnic or religious group. The logic for concentrating power within a loyal ethnic or religious group is drawn from work on coup-proofing. Ethnic or religious networks allow leaders to maintain closer bonds to political allies based on pre-existing mechanisms for mobilization or patronage surrounding identity and to galvanize support by positioning themselves as the sole leader of a community (Brubaker, 2004; King, 2001). Nevertheless, there may not be a particular draw for creating a PGM composed of a leader's ethnic or religious group as a coup-proofing measure as members of the security structure that are co-ethnic or co-religious to leaders can act as rivals to leaders within both the state and their ethnic or religious group (Roessler, 2011). Coup plotters may come from the leader's ruling coalition or even family, as in the case of Rifaat al-Assad's 1987 coup attempt against his brother Hafez al-Assad in Syria or Teodoro Obiang Nguema's successful overthrow of his uncle Francisco Macias Nguema in Equatorial Guinea in 1979. Ethnically or religiously concentrated PGMs may simply give coup plotters from a leader's own ethnic or religious group an alternative mechanism for replacing the leader. On the other hand, threats from outside

the ruling coalition endanger the political supremacy of the leader's ethnic or religious group, making ethnically and religiously-oriented PGMs more likely to stay loyal to the leader rather than the state. The process is seen in both Iraq and the Congo. While faced only with existential threats from within one's coalition, the Hussein regime formed the secular Jaysh Al-Quds (Jerusalem Army) shortly after taking power in early 1980. Once faced with both internal threats and the likelihood of foreign deposition, the regime created the more Sunni Arab-oriented Fedayeen Saddam in the mid-1990s. Similarly, the presence of threats to the governments of Patrice Lissouba and Denis Sassou-Nguesso¹⁰ led each to utilize ethnically concentrated militias: the Cobras, recruited from Sassou-Nguesso's Mboshi ethnic group and the Cocoyes, primarily recruited from Lissouba's central Nibolek region (French, 1997). It follows that PGMs that are composed of a leader's ethnic or religious allies would be particularly loyal to that leader when facing extra-coalitional threat due to the leader's role at the head the state and his/her identity group. This would function similarly to stacking members of a military leadership, without carrying the risk of empowering co-ethnic or co-religious rivals to a leader within government institutions. It follows that:

Hypothesis 2 *Given that a pro-government militia linkage exists, leaders facing threats to their political survival from sources outside of their ruling coalition are more likely to form linkages with ethnically or religiously-oriented pro-government militias.*

Having presented the hypotheses, the next section uses a large-N statistical analysis to broadly assess the factors that influence formation of PGM linkages with a regime.

¹⁰Each threat originating from the other leader: Sassou-Nguesso against Lissouba before 1997 and Lissouba against Sassou-Nguesso after 1997.

Data Operationalization and Statistical Models

Building on individual cases, a large-N analysis can uncover patterns of PGM linkage formation across all countries. Data on PGM linkages is obtained from the pro-government militia data-set available from Carey et al. (2013). The data-set uses media sources¹¹ to obtain information on the linkages between governments and pro-government militias operating between 1981 and 2007. Groups are coded as PGMs when they are: 1) identified as pro-government or sponsored by the government, 2) not part of regular security forces, 3) are armed and 4) have some organization. The data-set records when linkages begin and end (or lacking a formal resolution date, when a group was last active), characteristics associated with the group, the target of the group, its purpose and several other miscellaneous details. Coders of the data-set also choose from a set of characteristics attributed to PGMs including the words ‘ethnic’ and ‘religious.’

The author made several modifications to the data-set in order to adequately capture PGM linkage formation. The intent was to provide a more precise measurement of PGM linkage formation than work by Carey et al. (2015a,b); Mitchell et al. (2014), which uses the presence of PGMs in a country in any given year as an outcome variable for explaining why governments would form links to PGMs at the country level. The approach required modifying the country-year version of the data-set by coding separate variables for group formation and ethnic or religious group formation based on the first recorded year of militia activity in support of the government,¹² in a country in a given year rather than merely PGM incidence. This represents a gain in precision as a measure of PGM incidence does not account for whether PGMs have just been formed or were dissolved in

¹¹ Obtained from LexisNexis searches of news sources around the world, including major English-language newspapers, Xinhua, Agence Presse France and transcripts translated into English by the BBC World News Service. Search terms included “government militia”, “paramilitary”, “government death squads”, “government irregular forces”, and “vigilante.”

¹² This may not necessarily be the year that the linkage was formed or a particular group was organized.

a particular year, while a measure that only captures years where countries form linkages to PGMs provides for a more exact test of the hypotheses on linkage formation. Additionally, to adequately measure ethnically or religiously-oriented PGMs, any group to which coders ascribe either term based on news sources was coded as ethnic or religious by the author. In countries where no PGMs were observed, it was assumed that no linkage took place, rather than that the data is missing.

Given that data comes from news sources, there is potential for reporting bias due to variation in media penetration and attention on certain countries. Two issues arise: first, PGMs could only be coded as initiated based on their first appearance in the press, rather than their actual formation and second, some PGMs could go completely uncoded because the media environment they occupy does not allow for their detection. The former issue is largely unavoidable in research on groups in general, but the makers of the data-set only express concern on accurately capturing termination, rather than formation of PGM linkages, implying that it is a minimal issue. The second point is likely more salient and is explicitly addressed in the supplementary files with a separate analysis of potential heteroskedasticity as a result of reporting bias.

Operationalizing Threats to Political Survival

According to data on authoritarian regime change, leaders primarily face risk of removal from three sources: threats internal to the ruling coalition, external to the ruling coalition and foreign governments (Svolik and Akcinarogly, 2006). These are often distinct and non-overlapping concerns and may display different magnitude or significance across the various tests conducted in this study. The goal of each measure is to define threats from the perspective of leaders rather than coup-plotters, opposition leaders or foreign powers. Thus, the measures of each threat are

operationalized independently through three variables that capture each respective threat in a way that reflects observable information that leaders can employ to formulate a response. As shown in the appendix, there is no substantial collinearity between the three measures.

Risk of leader removal by members of a ruling coalition is captured by a measure of *time since a previous coup attempt*. While earlier measures of coup risk largely incorporated recent coups into their assessments (Bueno de Mesquita and Dickson, 2007), the degree this measure reflected coup threat was often conditional on the degree of legitimacy and civil society development in the post-coup regime (Belkin and Schofer, 2003). Carey et al. (2015a) utilize this operationalization as a way of using coup risk to predict PGM presence. Newer studies of coup threat have instead adopted coup attempts – attempts to remove a leader by actors within the ruling coalition that don’t succeed (Powell and Thyne, 2011) – as a measure of future coup risk. As coup attempts do not change the regime in power, but give the leader an idea that there is a risk of internal unrest that requires countermeasures, it is likely a better operationalization than recent successful coups or a structural measure of risk. The exact measure is an inverted number of years since a coup attempt ($\frac{1}{1+years}$), taking the value of one in the year an attempt took place and a diminishing value below one and approaching zero for every year that passes after a coup attempt, with countries that have no historic coup attempts receiving a zero. The transformation reflects the diminishing effect that the passage of time since a coup attempt has on the urgency leaders feel to develop a response.

Risk of removal by actors outside of the ruling coalition is captured by a dichotomous variable of whether the country’s leader in a particular year had initially taken power through *irregular entry*. An irregular entry takes place when leaders take power “outside of prevailing rules, provisions, conventions and norms of a country,” often through the use of force. Data on how leaders took power was obtained from the Archigos data-set on leader tenure and survival (Goemans et al.,

2009). The measure is used to gauge whether leaders *perceive* threats from outside of the ruling coalition, for the simple reason that taking power through irregular transitions is plausibly more likely to leave leaders worried about challengers who have some form of constitutional mandate to government and thus serve as a credible threat to depose the leader in question. While variables such as protest or presence of non-state violent actors also reflect the potential for domestic removal, their occurrence may not fully capture the full threat environment as some leaders could have successfully used PGMs to deter extant domestic opponents without a challenge. The variable is also an improvement over Carey et al. (2015a), who utilize several country-level predictors of civil conflict onset, such as mountainous terrain, regime type and ethnic fractionalization, which may predict conflict onset but not necessarily inform leaders as to a heightened threat to their rule.

Risk of removal by foreign actors is operationalized through a dichotomous measure of *foreign military presence* within a country. Data on foreign military presence is obtained from the updated Integrated Military Intervention (IMI) Data-set (Pearson and Baumann, 1993; Pickering and Kisangani, 2009). The presumption is that the presence of foreign forces in a country, either in the form of military occupation, a military invasion or simply a no-fly zone, as in the case of 1990s Iraq, presents leaders with an acute and observable risk of overthrow by a foreign force, which would lead to the formation of PGM linkages. The IMI data includes instances of forces that are present in a country and “support the government (including immediate restoration to abort coup)” or “oppose rebels or opposition group.” Since the presence of these military forces would be substantially less likely to lead to overthrow, they are excluded from the measure of foreign military presence. A series of models using the full measure on foreign troop presence, regardless of government support, is included in the supplementary files. The appendix also shows that all

three indicators of overthrow risk predict regime overthrow, demonstrating the validity of each in capturing the broader construct of threat to leader removal.

Other Independent Variables

Several other independent variables are included in the statistical models to account for alternative explanations of PGM linkage formation. Experiencing a civil conflict is a clear motive for the formation of PGM linkages and is mentioned as a factor by Roessler (2005) and Ahram (2011). Thus, a dichotomous measure of *intrastate conflict* is included by coding states as having intrastate conflict if they are identified as doing so by the PRIO Armed Conflict Data-set (Gleditsch et al., 2002).¹³

A functional variable of *government overthrow* is included to account for the formation of new PGMs out of existing rebel groups after a government is overthrown. The measure is obtained by combining successful coups identified by Powell and Thyne (2011) and irregular transitions in the Archigos data-set, capturing all years where overthrows took place. The variable is coded dichotomously.

Carey et al. (2015b) find that countries that are low-level democracies (1 to 5 on the POLITY index) and receive more aid from democracies as a proportion of GDP are more likely to have linkages with PGMs. As such, variables to assess both democracy and aid dependence are included in the model. Rather than using the exact measure of democracy from POLITY IV (Marshall et al., 2011), Vreeland's modified *X-Polity* measure and a *squared X-Polity* measure are included to account for non-linear effects. Vreeland's measure removes portions of the Polity indicator that

¹³ The assumption of this study is that interstate conflict alone is not sufficient to produce an explicit existential threat to leaders, given the prevalence of secessionist conflicts or other internal conflicts against constitutionally legitimate leaders that do not come close to threatening the ruling coalition.

correlate with political violence (Vreeland, 2008), a potential bias when the dependent variable is linkage to a militia. For aid linkages to democracies and autocracies, the AidData 2.1 data-set on donors and aid recipients around the world is utilized (Tierney et al., 2011). To separate aid received by each country according to regime type, donor countries are categorized by X-Polity score and create two measures for each country in a given year: cumulative aid received from democracies and cumulative aid from autocracies. These numbers are then divided by a measure of a country's total real GDP from the Penn World Tables (PWT) (Heston et al., 2012) and logged to standardize variation. The PWT data was also used to obtain standard data for *national population* and *GDP per capita* and logged forms of these variables are included in the models. There is a possibility that the incidence of human rights prosecutions on a country's soil may be a more direct predictor of blame evasion aid as a percentage of GDP. Data on human rights prosecutions is only available for countries that experienced democratic transitions between 1980 and 2006 and only in years after those countries experienced transitions. As such, the assumption that these trials are distinct from other non-transition human rights prosecutions is necessary for the variable to be a plausible control in the main model. The assumption, a detailed description of the variable and statistical tests including human rights prosecutions during transition are included in the appendix.

The Correlates of War National Material Capabilities Data was used to extract a measure of *military expenditures as a percentage of GDP* to gauge whether weak military capacity could influence governments to form PGM linkages (Singer et al., 1972). An indicator of *ethnolinguistic fractionalization*, derived by Roeder (2001) from the 1985 update of the Soviet *Atlas Narodov Mira* (ANM, 1964) was also included to account for the possibility that ethnic heterogeneity increases the likelihood of either PGM or ethnic PGM linkage formation. Two more in-depth measures of potential ethnic challengers: *the natural log of the proportion of the population of a country*

that belongs to politically excluded ethnic groups and the *natural log of the proportion of the population of a leader's ethnic group to the total population of politically included groups* were also included. These two measures, taken from the Ethnic Power Relations data-set (Wimmer et al., 2009), represent the magnitude of external and internal ethnic challenges, respectively, to the regime and may predict the formation of ethnic or religious PGMs. In addition, *PGM dissolution* was included as it could influence *PGM formation* in years of regime change when some PGMs are no longer linked with the outgoing government and rebel groups from the incoming government constitute new linkages. Based on collinearity identified in the second section of the appendix, some measures are not jointly included in regression models. Summary statistics for the variables are available in the first section of the appendix.

While state capacity is a prominent alternative hypothesis, it is difficult to operationalize, with many different measures available to capture distinct aspects of the strength of a state's authority over its territory Hendrix (2010). Some measures already included in the model, such as per capita GDP, military expenditures as a percentage of GDP and measures of regime type from Polity and X-Polity, can be proxies for state capacity. However, they are, at best, indirect measures. Even if any of the mentioned measures were significant predictors, it would be difficult to discern whether the effect was a result of weak state capacity or simply connected to the main underlying concept of the measure (i.e. poverty for GDP per capita). Thus, the best course of action is to combine several measures into an index that captures the concepts underlying state capacity. Arbetman Rabinowitz et al. (2013) developed relative political extraction and relative political reach to capture two key features of state capacity: the ability of the state to extract revenue from its citizens and the influence of state institutions over its territories. The measures are excluded from the main analysis because they do not include about 20% of the countries in the main sample.

Instead, the appendix details how the indeces are calculated and reports results of the alternative specifications.

Statistical Models

The two dependent variables are dichotomous and warrant the use of a logistic regression model. While uncontroversial, the relatively small number of positive outcomes – years where countries form PGM linkages (187) to overall observations (nearly 4000) could produce biased coefficients. As such, a rare-events specification of the logistic regression that corrects for the over-distribution of negative cases is utilized (King and Zeng, 2001).

The dependent variable corresponding to the second hypothesis: formation of ethnic or religious PGMs is also a binary variable, but is subject to the additional possibility of selection effects. The decision to form an ethnic or religious PGM is preceded by a decision to form a linkage with any PGM. Under these circumstances, leaders first decide to link with a PGM and then assess whether the PGM should be composed of members of their ethnic or religious group. This reflects a process of selection into forming any PGMs that should strongly influence the extent to which that linkage is with a militia that is ethnically or religiously-oriented. Given this two-stage process, the errors in the ethnic/religious PGM linkage model could be biased without a two-stage estimator because they do not factor in initial PGM formation. For dependent variables with normally distributed errors, a two-step correction is usually utilized (Heckman, 1979). While the Heckman two-step is not appropriate here because the dependent variable is dichotomous, a variation using a two-stage probit-probit selection model, adopted from Heckman, is used instead (de Ven and Praag, 1981). For unbiased identification, an instrumental variable must be included in only the

first stage of the model. The use of such an instrumental variable provides unbiased estimates only if the instrument is relevant (predicts the outcome in the first stage) and valid (is uncorrelated with second stage errors). In this case, PGM linkage dissolution is used as an instrument. PGM linkage dissolution satisfies the exclusion rule through an empirical anomaly in the data. In many instances where pro-government militias are coded as dissolving in the data, the coding is a consequence of regime change, where some PGMs lose their ‘pro-government’ status and others gain it as their linkage to opposition leaders evolves into a linkage to state leaders. For instance, Saddam Hussein’s overthrow precipitated the elevation of the Kurdish Peshmerga to PGM status and the dissolution of the Fedayeen Saddam as a formal pro-government militia. When governments are overthrown, the PGMs that serve those governments dissolve and new PGMs are formed based on the rebel groups that seized power, making dissolution a likely positive predictor of formation of new PGM linkages. Dissolutions and formations occur unrelated to one another, making it unlikely that dissolutions in a given year are connected to whether a PGM linkage had an ethnic or religious character. Ergo, PGM dissolution should be uncorrelated with any residual forms of ethnic or religious PGM linkage formation. The validity assumption is verified through two tests: first, just a 0.03 correlation, without significance, is found with the residual errors of a probit model with the remaining independent variables on ethnic or religious PGM linkage formation. Second, PGM formation is not significant when placed in an OLS regression model that predicts the residual error of the second stage of the selection model (see appendix for detailed specifications). Thus, PGM dissolution can be considered as a plausible instrument.

Several steps are taken across the models to account for country, time and year effects. First, standard errors are clustered at the country level to factor in the difference in the model across country. Then, to account for duration dependence, cubic polynomials are used in all binary models

(Carter and Signorino, 2010). Finally, to account for specific year effects, year fixed effects are included for some of the specifications. Country fixed effects are omitted as they preclude analysis of countries where no PGM linkages exist, changing the model to look at when, rather than if, pro-government militia linkages are formed in a country.

Results

Table VII shows results testing the first hypothesis, which finds conditional support as less time since a previous coup attempt predicts pro-government militia linkage formation. The effect is significant at the 0.05 level in all models and substantially stronger when country-years with ongoing civil conflicts are excluded. Interpreting the effect of recent coup attempts on PGM linkage formation can be done directly through odds ratios and reveals that experiencing a coup attempt in a given year increases the likelihood of forming a pro-government militia linkage by at least 124%. Given the diminishing effect of the time since coup attempt measure, the likelihood is reduced by $\frac{1}{2^n}$, where n is the number of years since a coup attempt took place. Thus, the increase in the likelihood of PGM linkage formation declines to 59.5% the year after an attempt, 28.75% the year after that, and so on. The diminishing effect is shown graphically through predicted probabilities on Figure 2. Additionally, bolstering the instrumental variable used to test the second hypothesis, both recent regime overthrow and PGM dissolution, associated with linkage turnover, predicting the formation of new PGM linkages in a given year. The alternative explanations don't perform as well: X-Polity score is not significant, and while log of aid from democracies is a significant predictor of PGM linkage formation in the main models, the effect is not significant in alternative specifications in the appendix. This difference with existing work of blame avoidance is notable

Table I: Rare Events Logistic Regression of Determinants of PGM Linkage Formation

	(1)	(2)	(3)	(4)	(5)	(6)
Recent Coup Attempt	2.792** (1.073)	2.483* (0.931)	2.578* (0.978)	5.088*** (2.244)	2.528* (1.005)	5.324*** (2.317)
Non-Supportive Foreign Military Presence	1.162 (0.221)	0.995 (0.213)	0.971 (0.214)	0.964 (0.327)	0.949 (0.210)	0.890 (0.301)
Leader Irregular Entry	1.346 (0.305)	1.039 (0.246)		1.063 (0.425)	1.095 (0.259)	1.209 (0.477)
X-Polity Score			1.027 (0.025)			
X-Polity Score Squared			0.994 (0.006)			
Log of Aid from Democracies as Pct. GDP		1.082* (0.042)	1.087* (0.044)	1.130* (0.055)	1.086* (0.045)	1.146* (0.071)
Log of Aid from Autocracies as Pct. GDP		0.983 (0.036)	0.982 (0.036)	0.920 (0.051)	0.984 (0.037)	0.894 (0.053)
Intrastate Conflict	3.658*** (0.857)	2.754*** (0.668)	2.712*** (0.663)		2.954*** (0.738)	
PGM Dissolution	5.479*** (1.253)	5.603*** (1.319)	5.325*** (1.274)	10.705*** (5.039)	6.313*** (1.604)	15.713*** (8.275)
Regime Overthrow	1.856 (0.615)	1.787 (0.612)	1.827 (0.589)	2.253 (1.466)	1.678 (0.598)	3.084* (1.772)
Log of Population		1.158 (0.090)	1.162 (0.093)	1.239* (0.132)	1.178* (0.089)	1.318* (0.148)
Log of per capita GDP		0.620*** (0.060)	0.612*** (0.070)	0.509*** (0.073)	0.629*** (0.066)	0.450*** (0.070)
Military Expenditures as pct. GDP		4.822 (8.363)	8.303 (13.670)	14.945 (35.247)	6.246 (13.111)	26.825 (61.131)
Log of Excluded Ethnic Pop. at Pct. Total		1.007 (0.073)	0.991 (0.075)	1.095 (0.086)	1.009 (0.075)	1.086 (0.098)
Log of Leader Group Pop. as Pct. of Included		1.006 (0.199)	1.020 (0.205)	0.809 (0.242)	0.996 (0.199)	0.806 (0.229)
Year Fixed Effects					✓	✓
Constant	0.030*** (0.006)	0.220 (0.210)	0.267 (0.288)	0.297 (0.460)	0.287 (0.281)	0.352 (0.609)
Countries	168	147	147	144	147	144
Observations (Country-Years)	4250	3611	3611	2908	3611	2665

Note: Odds Ratios presented in lieu of coefficients. Carter and Signorino (2010) cubic polynomials included in each model. Standard Errors clustered at the country level. Models 4 and 6 exclude cases with ongoing intrastate conflicts. * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$.

and likely comes from the different unit of analysis, as this study focuses on PGM linkage formation rather than incidence.

Figure 2: Predicted Probabilities of PGM Linkage as Time Passes from Coup Attempt (based on model 2, Table VII)

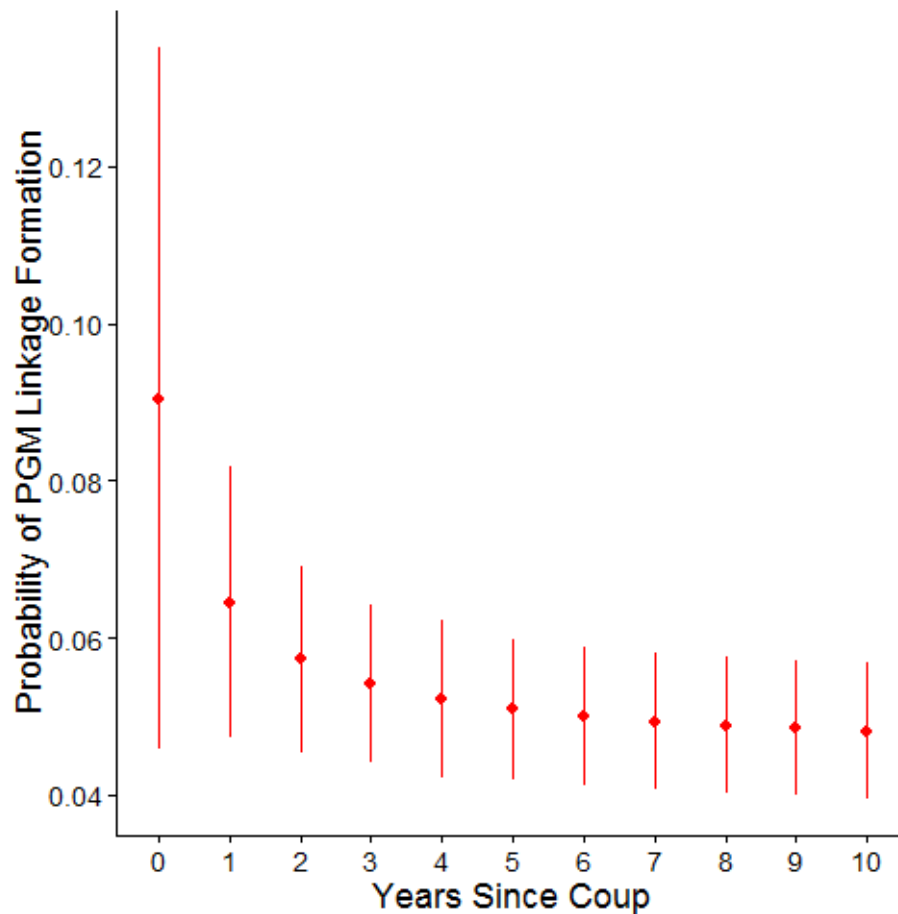


Table VIII reveals results from the probit-probit selection model on ethnic/religious PGM linkage formation. The results of the first stage probit are largely consistent with the non-selection analysis in table VII. The second stage reveals some confirmation of the second hypothesis in that linkages that take an ethnic or religious character appear to do so due to external pressure. Specifically, leaders are between 76% and 103% more likely to form ethnic or religious PGM linkages if there is a non-supportive foreign military presence in a given year. Nevertheless, leaders who

gained power through irregular entry do not appear to be more likely to form ethnic or religious PGMs, limiting the effect to foreign threats. Given that ρ – the indicator of selection from the first stage to the second stage – is not significant, it is plausible to treat the two equations as independent and assume there is no significant selection effect on formation of ethnic or religious PGMs. The effect of foreign troop presence retains direction, magnitude and significance when only a single-stage logistic model predicting if a PGM that forms in a given year is ethnic or religious is used. As mentioned, an analysis using a full measure of foreign troop presence that includes military forces that support the government is included in the appendix. Those results show little change in either the magnitude or the significance of the effect of foreign military presence on ethnic/religious PGM formation.

The appendix also includes results from several other model specifications. When including measures of relative political capacity, the main predictors are unchanged and only relative political extraction emerges as a significant predictor of ethnic or religious PGM formation, albeit not consistently. In order to verify the assumption that PGMs give leaders advantages in surviving politically after being overthrown, a test is conducted on the relationship between PGM linkage in the year of overthrow and leader fate. The results show that leaders with PGM linkages are more likely to retain some political influence after being overthrown. Additionally, the appendix includes several alternative specifications that incorporate variation in authoritarian regime types into the models, but the addition of these variables does not alter the main findings. The previously discussed correction for heteroskedasticity due to media bias is also applied and does not change the main findings. Finally, including a variable for the incidence of human rights trials during a democratic transition for a country in a given year has no effect on the PGM linkage formation and does not change the existing findings.

Table II: Probit-Probit Selection Model of Determinants of Identity PGM Linkage Formation

	(1)		(2)		(3)	
	Any PGM	Identity PGM	Any PGM	Identity PGM	Any PGM	Identity PGM
Recent Coup Attempt	1.570*	1.166	1.593*	1.301	1.678**	1.071
	(0.294)	(0.503)	(0.305)	(0.595)	(0.317)	(0.474)
Non-Supportive Foreign Military Presence	0.983	2.171***	0.969	2.298***	1.060	1.881**
	(0.101)	(0.457)	(0.103)	(0.503)	(0.100)	(0.382)
Leader Irregular Entry	1.005	1.598			1.138	1.458
	(0.120)	(0.438)			(0.126)	(0.420)
X-Polity Score			1.013	0.982		
			(0.012)	(0.026)		
X-Polity Score Squared			0.997	1.001		
			(0.003)	(0.005)		
Log Aid from Democracies as Pct. GDP	1.033	0.903	1.035	0.907	1.011	0.940
	(0.019)	(0.059)	(0.020)	(0.058)	(0.016)	(0.057)
Log Aid from Autocracies as Pct. GDP	0.987	0.987	0.986	0.984	1.004	0.978
	(0.017)	(0.041)	(0.017)	(0.040)	(0.017)	(0.042)
Intrastate Conflict	1.723***	0.939	1.703***	0.997	1.746***	0.997
	(0.195)	(0.285)	(0.196)	(0.301)	(0.203)	(0.293)
Regime Overthrow	1.357	0.482*	1.364	0.567	1.428*	0.533
	(0.240)	(0.162)	(0.226)	(0.177)	(0.248)	(0.175)
Log of Population	1.081*	1.142	1.083*	1.174	1.071*	1.154
	(0.041)	(0.110)	(0.041)	(0.123)	(0.032)	(0.126)
Log of per capita GDP	0.787***	1.252	0.785***	1.195		
	(0.038)	(0.178)	(0.044)	(0.178)		
Military Expenditures as pct. GDP	2.299	1.033	2.899	0.653	2.103	1.588
	(1.803)	(1.794)	(2.197)	(1.123)	(1.440)	(2.755)
Log of Excluded Ethnic Pop. at Pct. Total	1.012	0.934	1.004	0.912		
	(0.035)	(0.103)	(0.035)	(0.103)		
Log of Leader Group Pop. as Pct. of Included	0.992	1.224	0.996	1.202		
	(0.098)	(0.316)	(0.295)	(0.100)		
Ethnolinguistic Fractionalization					1.792**	0.890
					(0.320)	(0.440)
PGM Dissolution	2.642***		2.576***		2.510***	
	(0.327)		(0.324)		(0.313)	
Constant	0.381*	0.082	0.409	0.100	0.052***	0.305
	(0.174)	(0.109)	(0.207)	(0.134)	(0.017)	(0.457)
ρ		0.820		0.810		0.785
		(0.237)		(0.243)		(0.217)
Countries	148		148		156	
Observations (Country-Years)	3611	177	3611	177	3835	177

Note: Odds Ratios presented in lieu of coefficients. Carter and Signorino (2010) cubic polynomials included in each selection stage. Standard Errors clustered at the country level. * p<0.05, ** p<0.01, *** p<0.001.

Thus, the character of linkage formation reflects that leaders face both external and internal threats to their survival. Threats from inside of a ruling coalition likely force leaders to initiate the linkages with PGMs, but it is external threats from foreign forces that lead leaders to create ethnic or religiously-based PGM linkages. It is likely that once threats multiply, regimes must mobilize their most loyal supporters as a way of preserving themselves as an insurgency after the overthrow takes place.

Conclusion

Both hypotheses find conditional support. Only the threat of internal removal is associated with pro-government militia linkage formation, while foreign threats are associated with formation of ethnic or religious PGMs. The recent academic focus on pro-government militias has led to numerous theoretical advances in understanding why governments maintain relationships with PGMs. This study consolidates those advances through a systematic large-N analysis of the determinants of pro-government militia linkage formation and the characteristics PGMs take after linkages are made. Moreover, it places work on pro-government militias within a larger body of research on civil-military relations and ruling coalition dynamics. The results strongly suggest that, much like the related coup-proofing measures, pro-government militia linkages should be treated as expressions of desire for leader survival. While often associated with human rights violations, PGM-led repression may simply be a characteristic of a broader goal of self-preservation rather than a deliberate tactic to evade international donor pressure. The driving role of increased loyalty that PGMs have to the leader compared to other security forces cannot be overstated. The desire for loyalty is expressed in the development of the fervently pro-government and Alawite-dominated Shabiha

militia in the Syrian Civil War. When repressing civilian dissent at the outset of the conflict, the army was prone to large-scale defections that bolstered rebel ranks, whereas the institution of the Shabiha made defections less likely when drawing from individuals who are more loyal to Bashar al-Assad's regime. Future extensions of the study of PGM dynamics, including the rationale for multiple PGMs and PGM linkage dissolution should therefore consider threat to leader survival as a predictive factor.

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Appendix

Summary Statistics

Table III: Summary Statistics

Variable	Mean	St. Dev.	Minimum	Maximum
Dependent Variables				
PGM Formation	.0439909	.2050982	0	1
Identity PGM Linkage	.021542	.1451987	0	1
Independent Variables				
PGM Dissolution	.0417234	.199979	0	1
Interstate Conflict	.169161	.3749366	0	1
Foreign Military Presence	.2206349	.4147218	0	1
Non-Supportive Foreign Military Presence	.1653061	.3714987	0	1
Leader Irregular Transition	.2102041	.4074997	0	1
Recent Coup Attempt	.0625947	.1566633	0	1
Recent Regime Overthrow	.0251701	.1566592	0	1
Log of Population	8.879356	1.779009	4.248624	14.08598
Log of per Capita GDP	8.098269	1.353478	4.878693	11.42636
X-Polity	1.494532	5.117165	-8	9
X-Polity Squared	28.41264	19.40499	0	81
Military Expenditures as a pct. of GDP	.0216797	.0415746	0	1.135963
Ethnolinguistic Fractionalization	.4709918	.2738345	0	.98
Log Aid from Democracies as a pct. of GDP	4.090862	3.021236	0	21.32585
Log Aid from Autocracies as a pct. of GDP	1.251724	2.623812	0	13.45629
Log Excluded Ethnic Population as pct. of Total	1.516822	1.481241	0	5.809143
Log of Leader's Ethnic Group Pop. as pct. Included Pop.	-.3101908	.586902	-3.314186	0

Evaluating Collinearity of Independent Variables

A basic assumption of regression analysis is that co-variates that predict outcomes should not be highly correlated with one another. Totally collinear regressors create non-singular matrices, but even non-perfect collinearity can bias standard errors and coefficients enough to produce either spurious relationships or the absence of significance where significance is actually present (Greene,

2003). Thus, highly collinear regressors should not be included in the same model as one another, as it becomes problematic to distinguish the effects of one particular regressor.

Table IV: Correlation Matrix of Leader Threat Variables

Variable Names	Foreign Troops	Irregular Entry	Coup Attempt	Overthrow
Foreign Troop Presence	1.0000			
Leader Irregular Entry	0.0913	1.0000		
Recent Coup Attempt	0.0784	0.259	1.0000	
Regime Overthrow	0.0648	0.2371	0.1504	1.0000

Note: 4395 total observations in sample.

The first concern is about collinearity in the three main independent variables: time since coup attempt, leader taking power through irregular transition and foreign troop presence, and one of the controls: regime overthrow. Table IX shows a correlation matrix of the variables. Only regime overthrow shows some collinearity with leaders having gained power through irregular entry. Excluding the variable from either the first or second hypothesis tests somewhat strengthens the effect of recent coup attempts and does not alter the direction or significance of the remaining co-variates.

Table V: Correlation Matrix of Democracy and Wealth Variables

Variable Names	X-Polity	Irreg. Trans.	GDP p.c.	ELF	Media	IHROs
X-Polity	1.0000					
Leader Irregular Transition	-0.4164	1.0000				
Per Capita GDP	0.4452	-0.3831	1.0000			
Ethnolinguistic Fractionalization	-0.1519	0.1569	-0.4127	1.0000		
Media Freedom	-0.7039	0.3550	-0.5346	0.119	1.0000	
Human Rights Org. Membership	0.5389	-0.2719	0.5071	-0.1445	-0.5290	1.0000

Note: 3194 total observations in sample. Correlations over .5 in **bold**.

An additional collinearity concern is between measures that are closely related to democracy and wealth. Democracy and wealth are known to strongly correlate (Przeworski et al., 2000) and close relationships have also been shown between per capita income and ethnic diversity (Easterly

and Levine, 1997). With measures of POLITY, irregular transition, media freedom, per capita GDP, human rights NGO membership and ethnolinguistic fractionalization (ELF), collinearity is likely to occur. Table V shows the correlation matrix of the variables. Both media freedom and human rights organization membership are highly correlated to one another, GDP per capita and democracy. In the next section effort is made to avoid placing those variables in the same model. Moreover, correlations of greater than 0.4 are observed between irregular transition and democracy and ELF and GDP per capita, similarly necessitating separate models to analyze the effects of each variable separately as controls. These models are shown in the main paper.

Indicators of Leader Threat as Predictors of Overthrow

The theoretical contribution of the main article is in linking leaders' perception of threats to their rule to PGM linkage formation. While this argument does not require that the chosen indicators of threat actually be predictive of leader overthrow, it is a valuable exercise to see whether leaders are more likely to be overthrown given the presence of coup threat, foreign threat and/or external domestic threats. If indicators of these threats successfully predict overthrow, they can be considered valid measures of threats to regime overthrow as faced by leaders. Thus, this section serves as a test of construct validity for the main independent variables, rather than a theoretically relevant analysis.

The main independent variables are operationalizations of three distinct threats faced by leaders: coups, external removal and foreign imposed regime change. Coup threat is operationalized through an inverted variable of years since a coup threat, external threat through a dichotomous measure of whether a leader was removed through extra-constitutional means and foreign imposed regime change threat, operationalized by the presence of non-supportive foreign troops within a given country. The outcome variable of interest, whether a leader is overthrown in a given year is described in the main article, as are controls for ethnolinguistic fractionalization and GDP per capita, which are included in separate models based on the colinearity found in the previous section. Finally, dummy variables for several authoritarian regime types are also included to account for potential variation in the frequency with which autocratic leaders are overthrown based on the type of regime that they are a part of (Svolik, 2012). The analysis is conducted through a rare events logistic regression, as in the main article.

Table VI: Rare Events Logistic Regression Predicting Leader Overthrow

	(1)	(2)
Leader Irregular Entry	13.289*** (5.259)	14.027*** (5.553)
Non-Supportive Foreign Military Presence	1.541 (0.368)	1.685* (0.418)
Recent Coup Attempt	4.609*** (1.537)	4.731*** (1.599)
Party regime	0.596 (0.215)	0.679 (0.245)
Personalist regime	0.447* (0.183)	0.608 (0.264)
Military regime	1.042 (0.419)	1.178 (0.459)
Log of per capita GDP	0.760** (0.078)	
Ethnolinguistic Fractionalization		1.266 (0.712)
Constant	0.059** (0.051)	0.007*** (0.003)
Number of Observations	4265	4006

Note: Odds Ratios presented in lieu of coefficients. Standard errors clustered at the country level. Carter and Signorino (2010) cubic polynomials included in each model. * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$.

Table VI shows the results of the models predicting overthrow. Both inverted years since coup attempt and leaders gaining power by irregular entry strongly predict overthrow in a given year. While foreign troop presence is a weaker predictor, only approaching 0.1 significance with GDP per capita in the model, it maintains a large positive effect. In short, it appears that all three of the chosen measures of leader threat are predictors of actual overthrow, making them plausible constructs of leader threat.

Potential Media Bias

Given that data on pro-government militias is compiled exclusively through media sources, it holds the potential that some groups are excluded due to a lack of sufficient media coverage of a particular country or because that domestic media coverage is likely to exclude the formation of linkages to pro-government militias. Three variables are used to capture media freedom and information dissemination. The first is a measure of media freedom from Van Belle (2000); Whitten-Woodring and Van Belle (2014).¹⁴ It is expected that consistent patterns of PGM linkage formation will be harder to find in countries with less press freedom and thus less reporting about the inner workings of the ruling coalition, making variance higher in countries with less press freedom. The second factor that may influence reporting is the presence of international human rights NGOs, which could provide information about ruling coalition behavior outside of the domestic media. To measure this presence, a count of the number of human rights NGOs that have members in a given country in a given year is also included to predict variance. Data on human rights NGO membership is taken from the Yearbook of International Associations and coded by Smith and Wiest (2005). Finally, actual human rights NGO reports may shed light on PGMs in a way that domestic press and mere NGO presence cannot. To capture this, a measure of the number of country-specific human rights NGO news releases and background in a given year is also employed in to assess media bias, obtained from coding by Murdie and Davis (2012). Due to collinearity of the media freedom and human rights membership measures, these were included separately in each model.

¹⁴The measure assigns a trichotomous measure on the basis of degree of repercussions for criticism of government and government officials in the public sphere, where "Free" is assigned to countries where "criticism of government and government officials is a common and normal part of the political dialogue in the mediated public sphere," "Imperfectly Free" to countries where there are some costs to criticism, but some criticism does occur, while "Not Free" is assigned to the remaining countries where it is not possible to safely criticize major policy failings.

Table VII: Rare Events Logistic Regression of Determinants of PGM Linkage Formation with Reporting Variables

	(1)	(2)	(3)	(4)
Recent Coup Attempt	2.653*	2.710**	2.617*	2.579*
	(1.042)	(1.020)	(1.045)	(0.991)
Non Supportive Foreign Military Presence	1.224	1.258	1.321	1.317
	(0.284)	(0.286)	(0.304)	(0.300)
Log Aid from Democracies as Pct. of GDP		1.041		1.048
		(0.043)		(0.040)
Log Aid from Autocracies as Pct. of GDP		0.987		0.993
		(0.042)		(0.039)
Intrastate Conflict	3.447***	2.871***	3.588***	2.905***
	(0.818)	(0.761)	(0.881)	(0.791)
PGM Dissolution	5.609***	5.681***	5.260***	5.523***
	(1.463)	(1.507)	(1.416)	(1.519)
Regime Overthrow	1.831	1.885*	1.965*	1.974*
	(0.578)	(0.601)	(0.611)	(0.624)
Log of Population		1.187*		1.200*
		(0.098)		(0.111)
Military Expenditures as pct. GDP		3.097		2.468
		(5.079)		(4.220)
Log Excluded Ethnic Population as pct. of Total		0.961		0.966
		(0.091)		(0.093)
Log of Leader's Ethnic Group Pop. as pct. Included Pop.		0.768		0.737
		(0.175)		(0.172)
Media Freedom	1.387*	1.340		
	(0.210)	(0.247)		
Number of Human Rights Reports	1.013	1.007	1.016	1.011
	(0.011)	(0.011)	(0.011)	(0.011)
Number of Human Rights NGOs			0.996	0.993
			(0.006)	(0.007)
Constant	0.014***	0.003***	0.032***	0.005***
	(0.006)	(0.002)	(0.008)	(0.004)
Countries	161	140	159	138
Observations	2985	2514	2948	2477

Note: Odds Ratios presented in lieu of coefficients. Carter and Signorino (2010) cubic polynomials included in each model. Standard Errors clustered at the country level. * p<0.05, ** p<0.01, *** p<0.001.

The effect of media freedom and human rights reporting could be direct, with countries with media bias in a given year being less likely to report PGM linkages. Table VII shows results from rare events logistic regressions that include the mentioned variables to evaluate reporting bias. Due to collinearity, measures of irregular leader entry, GDP per capita and Polity were removed from the models. In all four models, only media freedom shows a significant and positive impact on the formation of PGMs, but the effect does not alter the significance of the recent coup variable.

Even if predictors of media bias are not direct predictors of PGM linkage formation, they could still impact an unbalanced distribution in model errors. This form of measurement error could introduce heteroskedasticity into any regression model by increasing the variance for countries with less media penetration, but not others. In OLS regressions, heteroskedasticity is normally addressed by using robust standard errors, however the White (1980) test that is normally used for OLS models does not correct heteroskedasticity in non-linear models (King and Roberts, 2014). To explicitly model heteroskedasticity, a heteroskedastic probit is employed. In this model, first stage predictors can account for a particular heteroskedastic error structure in the second stage, correcting for heteroskedasticity and yielding a theoretically unbiased model (Greene, 2003). Nevertheless, it should be noted that the model does not leave a way to distinguish between unbiased estimates and a potentially misspecified regressors in the first stage if heteroskedasticity is detected.

Table VIII shows the results of the heteroskedastic probit. Media freedom becomes a positive predictor of variance in the model, with the number of human rights reports also occasionally rising to a positive and significant effect. The Wald test for the first two models shows at least some heteroskedasticity was corrected by adding the media freedom variables, with the ability to reject the null of no heteroskedasticity at 90% confidence in the second model. Once media freedom is removed from the first stage of the model, the Wald test can no longer reject the null

Table VIII: Heteroskedastic Probit Regression of Determinants of PGM Linkage Formation

	(1)	(2)	(3)	(4)
Probit Model				
Recent Coup Attempt	1.745*	1.768*	1.587*	1.569*
	(0.463)	(0.450)	(0.332)	(0.310)
Non Supportive Foreign Military Presence	1.168	1.161	1.169	1.148
	(0.190)	(0.180)	(0.144)	(0.135)
Leader Irregular Entry	1.206	1.170	1.219	1.152
	(0.214)	(0.195)	(0.160)	(0.139)
Log Aid from Democracies as Pct. of GDP		1.026		1.020
		(0.025)		(0.018)
Log Aid from Autocracies as Pct. of GDP		0.986		0.992
		(0.026)		(0.018)
Intrastate Conflict	2.465***	2.152***	1.941***	1.720***
	(0.477)	(0.425)	(0.230)	(0.212)
PGM Dissolution	4.210***	3.867***	2.829***	2.608***
	(0.962)	(0.880)	(0.450)	(0.401)
Regime Overthrow	1.302	1.350	1.196	1.236
	(0.357)	(0.369)	(0.237)	(0.242)
Log of Population		1.117		1.093*
		(0.065)		(0.048)
Military Expenditures as pct. GDP		2.063		1.528
		(2.290)		(1.265)
Log Excluded Ethnic Population as pct. of Total		0.980		0.992
		(0.055)		(0.040)
Log of Leader's Ethnic Group Pop. as pct. Included Pop.		0.859		0.866
		(0.137)		(0.103)
Constant	0.068***	0.023***	0.131***	0.058***
	(0.020)	(0.016)	(0.016)	(0.023)
Predictors of Variance				
Media Freedom	1.120**	1.115*		
	(0.048)	(0.054)		
Number of Human Rights Reports	1.008	1.004	1.010*	1.007
	(0.004)	(0.005)	(0.005)	(0.005)
Number of Human Rights NGOs			0.999	0.998
			(0.002)	(0.002)
Wald Test	10.96*	5.81	4.43	2.98
Countries	161	140	159	138
Observations	2985	2514	2948	2477

Note: Odds Ratios presented in lieu of coefficients. Carter and Signorino (2010) cubic polynomials included in each model. Standard Errors clustered at the country level. * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$.

hypothesis that the variance is equal to zero at any level, calling any heteroskedasticity and, thus, any reporting bias into question within the model. Nevertheless, results point toward to some media bias in predicting PGM linkage formation, namely that pro-government militias are more likely to form in environments more open to the media. Accounting for this effect, however, does not alter the findings in the main paper.

Validating Instrument

A probit-probit selection model is used to analyze the determinants of ethnic or religious PGM (pro-government militia) formation within the larger body of PGM formations. In order to appropriately run the selection model, shown in table 4 of the main article, one variable from the first stage of the model must be excluded from the second stage. If this variable is theoretically independent from the errors of the first stage, the selection effect that transfers from the first stage of the model is appropriately taken into account in the second stage. The variable must satisfy the exclusion restriction: relevance (significant effect in the first stage) and validity (no correlation with second stage errors). While part of testing an instrument comes from either theoretical or face validity, there are definitive tests that can be carried out for instrument validity, one of which is presented here. The test directly looks at the effect the instrument has on the residuals of the second stage when put together with other independent variables from that stage. If the instrument has a significant effect, then the assumption of validity is violated and it is not considered a valid instrument (Cameron and Trivedi, 2005).

Results for the instrument in question, PGM linkage dissolution, are shown in table IX. The results show no significant effect of PGM dissolution on the residuals of the PGM linkage formation models. There is similarly no significant effect in a bivariate specification of the same model. Given this and tests in the main article, it is likely that the PGM dissolution variable is both a valid and relevant instrument and fit to be used in the selection model in the main article.

Table IX: OLS Regression predicting residual error from model of PGM linkage formation

	Coef.	S.E.
Civil War	-0.005	(0.068)
Number of Groups	0.012	(0.026)
Non-Supportive Foreign Military Presence	-0.026	(0.047)
Regime Overthrow	-0.064	(0.076)
Recent Coup Attempt	-0.037	(0.106)
X-Polity Score	-0.003	(0.005)
X-Polity Score Squared	0.000	(0.002)
Military Expenditures as a pct. GDP	0.231	(0.290)
Log of Population	0.008	(0.017)
Log per Capita GDP	-0.007	(0.019)
Log of Aid from Democracies at Pct. of GDP	-0.001	(0.004)
Log of Aid from Autocracies at Pct. of GDP	-0.005	(0.005)
Log Excluded Ethnic Population as pct. of Total	0.007	(0.014)
Log of Leader's Ethnic Group Pop. as pct. Included Pop.	-0.000	(0.028)
Group Dissolution	0.188	(0.119)
Constant	-0.072	(0.223)
R-squared	0.004	
Number of Observations	3595	

Note: Standard errors clustered at the country level. * $p < 0.05$.

Presence of Pro-Government Foreign Military Forces

As mentioned in the main paper, the measure of foreign military forces within a country omits forces that are either coded as “support[ing] the government [including immediate restoration to abort coup]” or “oppos[ing] rebels or opposition group” in the Integrated Military Intervention Data-set (Pearson and Baumann, 1993; Pickering and Kisangani, 2009). This could present a problem as leaders have been previously deposed by forces that are, up to the deposition, considered loyal, most prominently in the cases of Jean-Bedel Bokassa in the Central African Republic (French, 1996) and of Hafizullah Amin and Babrak Karmal in Soviet-occupied Afghanistan (Kalinovsky, 2009). Thus leaders may anticipate that even ostensible pro-government forces can precipitate their deposition and take measures to account for such actions. In order to account for

this, a full measure that fully accounts for the presence of foreign troops replaces the measure of non-pro-government foreign troops in an alternative specification of the selection model in Table 3 of the main article.

Table X presents results from the alternative specification. While both the significance and magnitude of the foreign troops variable decreases from the original measure, the overall measure remains significant. The results bolster the theory that underlies the finding, as even if pro-government troops could be suspected of plotting to overthrow a regime, leaders may not see as great of a need to take countermeasures through PGM linkage formation as in instances where foreign military forces either take a more neutral posture or are openly hostile to the leadership of a given country.

Table X: Probit-Probit Selection Model of Determinants of Identity PGM Linkage Formation with Full Foreign Military Variable

	(1)		(2)		(3)	
	Any PGM	Identity PGM	Any PGM	Identity PGM	Any PGM	Identity PGM
Recent Coup Attempt	1.563*	1.072	1.585*	1.203	1.658**	0.997
	(0.296)	(0.451)	(0.308)	(0.545)	(0.317)	(0.438)
Foreign Military Presence	1.083	1.938**	1.073	2.007**	1.136	1.676*
	(0.102)	(0.457)	(0.104)	(0.474)	(0.101)	(0.379)
Leader Irregular Entry	0.999	1.678			1.131	1.555
	(0.121)		(0.452)		(0.127)	(0.433)
X-Polity Score			1.013	0.977		
			(0.012)	(0.026)		
X-Polity Score Squared			0.997	1.001		
			(0.003)	(0.005)		
Log of Aid from Democracies at Pct. of GDP	1.032	0.904	1.033	0.908	1.010	0.939
	(0.019)	(0.059)	(0.020)	(0.058)	(0.016)	(0.056)
Log of Aid from Autocracies at Pct. of GDP	0.987	0.979	0.987	0.976	1.003	0.974
	(0.017)	(0.042)	(0.017)	(0.041)	(0.017)	(0.043)
Intrastate Conflict	1.699***	0.945	1.678***	1.013	1.729***	1.010
	(0.192)	(0.280)	(0.193)	(0.298)	(0.199)	(0.292)
Regime Overthrow	1.359	0.525	1.362	0.630	1.434*	0.571
	(0.242)	(0.177)	(0.227)	(0.193)	(0.250)	(0.188)
Log of Population	1.086*	1.167	1.088*	1.205	1.076*	1.173
	(0.041)	(0.120)	(0.042)	(0.135)	(0.033)	(0.132)
Log of per capita GDP	0.793***	1.234	0.790***	1.174		
	(0.038)	(0.176)	(0.044)	(0.175)		
Military Expenditures as pct. GDP	2.061	1.753	2.578	1.100	1.997	2.667
	(1.636)	(3.279)	(1.976)	(2.028)	(1.392)	(4.936)
Log Excluded Ethnic Population as pct. of Total	1.009	0.913	1.001	0.892		
	(0.035)	(0.101)	(0.036)	(0.098)		
Log of Leader Group Pop. as pct. Included Pop.	0.995	1.248	1.000	1.225		
	(0.101)	(0.320)	(0.102)		(0.296)	
Ethnolinguistic Fractionalization					1.755**	0.785
					(0.319)	(0.387)
PGM Dissolution	2.630***		2.567***		2.501***	
	(0.323)		(0.321)		(0.311)	
Constant	0.339*	0.074	0.366*	0.093	0.049***	0.277
	(0.156)	(0.105)	(0.185)	(0.133)	(0.016)	(0.424)
ρ		0.802		0.783		0.768
		(0.236)		(0.238)		(0.215)
Countries	148		148		156	
Observations (Country-Years)	3611	177	3611	177	3835	177

Note: Odds Ratios presented in lieu of coefficients. Carter and Signorino (2010) cubic polynomials included in each selection stage. Standard Errors clustered at the country level. * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$.

State Capacity Results

As mentioned in the main article, state capacity is difficult to operationalize as a concrete indicator or set of indicators. The study utilizes Arbetman Rabinowitz et al. (2013)'s relative political extraction and relative political reach measures as aggregate indices that may do better than indirect indicators at capturing the concept. One dimension, relative political extraction, is designed to predict a government's ability to extract revenue from its constituents. It is derived by obtaining the predicted value for total tax revenues as a percentage of GDP when regressed on indicators for time, per capita GDP, mineral production as a percentage of GDP, exports as a percentage of GDP, health expenditures as a percentage of GDP and OECD membership. The other measure, relative political reach, is designed to predict a government's ability to hold control over its territory. It is derived by obtaining the predicted value for labor force participation rate when regressed on indicators for time, per capita GDP, mineral production as a percentage of GDP, exports as a percentage of GDP, health expenditures as a percentage of GDP and OECD membership. Both measures are standardized to the average of surrounding countries. Both measures are available for only a select number of countries, constraining the sample of total countries from the main model by about 20%. Given this missingness does not take place within countries across time, imputation may produce more biased outcomes as there is no baseline for a particular country for relative political capacity. Consequently, imputation is not conducted and a truncated sample is used for supplementary statistical tests outside of the main model.

Table XI shows the rare events logistic model testing the first hypothesis with both state capacity measures included as independent variables.¹⁵ The most notable feature in this iteration

¹⁵There is a fairly small, -0.122 correlation between the two measures, so they are included together without much concern for multicollinearity.

Table XI: Rare Events Logistic Regression of Determinants of PGM Linkage Formation with State Capacity Measures

	(1)	(2)	(3)	(4)	(5)
Recent Coup Attempt	2.345* (0.943)	2.469* (1.015)	4.606** (2.238)	2.520* (1.033)	4.337** (2.082)
Non Supportive Foreign Military Presence	0.972 (0.221)	0.961 (0.227)	0.728 (0.300)	0.910 (0.215)	0.677 (0.304)
Leader Irregular Entry	1.163 (0.294)		1.168 (0.461)	1.241 (0.326)	1.437 (0.578)
X-Polity Score		1.023 (0.026)			
X-Polity Score Squared		0.996 (0.006)			
Log Aid from Democracies as Pct. of GDP	1.097 (0.054)	1.109* (0.055)	1.134* (0.070)	1.105* (0.056)	1.133 (0.082)
Log Aid from Autocracies as Pct. of GDP	0.977 (0.039)	0.976 (0.039)	0.910 (0.056)	0.981 (0.039)	0.888 (0.058)
Intrastate Conflict	2.697*** (0.723)	2.676*** (0.723)		2.927*** (0.810)	
PGM Dissolution	5.025*** (1.192)	4.756*** (1.135)	8.548*** (4.224)	5.850*** (1.553)	15.289*** (8.567)
Regime Overthrow	1.394 (0.522)	1.484 (0.541)	1.881 (1.348)	1.340 (0.521)	2.751 (1.697)
Log of Population	1.208* (0.115)	1.199 (0.120)	1.356* (0.183)	1.228* (0.115)	1.449* (0.215)
Log of per capita GDP	0.553*** (0.059)	0.534*** (0.063)	0.437*** (0.061)	0.567*** (0.064)	0.395*** (0.060)
Military Expenditures as pct. GDP	1.486 (2.865)	2.403 (4.451)	1.908 (7.230)	1.992 (4.792)	9.534 (35.693)
Log Excluded Ethnic Pop. as pct. of Total	1.012 (0.083)	0.994 (0.084)	1.153 (0.101)	1.020 (0.088)	1.158 (0.118)
Log of Leader Group Pop. as Pct. of Included	1.080 (0.218)	1.091 (0.227)	0.822 (0.243)	1.065 (0.219)	0.848 (0.246)
Relative Political Extraction	1.162 (0.194)	1.125 (0.184)	1.206 (0.355)	1.180 (0.214)	1.251 (0.392)
Relative Political Reach	0.537 (0.201)	0.507 (0.197)	0.470 (0.227)	0.571 (0.232)	0.533 (0.284)
Year Fixed Effects				✓	✓
Constant	0.568 (0.676)	0.965 (1.267)	0.755 (1.265)	0.604 (0.738)	0.612 (1.100)
Countries	120	120	117	120	117
Observations (Country-Years)	3055	3055	2405	3055	2042

Note: Odds Ratios presented in lieu of coefficients. Carter and Signorino (2010) cubic polynomials included in each model. Standard Errors clustered at the country level. Models 3 and 5 exclude cases with ongoing intrastate conflicts. * p<0.05, ** p<0.01, *** p<0.001.

is the loss of observations by nearly a third for some of the models compared to the tests in the main article. Nevertheless, the effect of recent coup attempts on the formation of pro-government

militias linkages remains stable and significant. On the other hand, neither of the relative political capacity measures approach significance. Table XII shows results from the selection model testing the second hypothesis. Once again, the effect of foreign military presence in the second stage remains significant and positive on the formation of the ethnic or religious PGM linkages. Relative political extraction appears to have the expected negative and significant effect on the formation of ethnic or religious PGMs. but the effect is not consistently significant across all models. In terms of control variables, a new effect appears for aid from democracies as a percentage of GDP, as more aid seems decrease the likelihood of ethnic or religious PGM formation, but the effect is not consistent across all models. What is consistent is a negative effect of aid from democracies as a percentage of GDP on the formation of ethnic or religious PGMs. This effect suggests that countries that receive less aid from democracies are more likely to form ethnic or religious PGMs. The effect may introduce a caveat into the blame aversion hypothesis as it suggests that non-ethnic or religious PGMs may sometimes be created to deal with international donor pressure, while ethnic and religious PGMs may be created to deal with more direct foreign threats. Otherwise, the main effects of the study from the main article are unchanged in terms of direction, significance and magnitude.

Table XII: Probit-Probit Selection Model of Determinants of Identity PGM Linkage Formation with State Capacity Measures

	(1)		(2)		(3)	
	Any PGM	Identity PGM	Any PGM	Identity PGM	Any PGM	Identity PGM
Recent Coup Attempt	1.530*	0.898	1.558*	0.945	1.657**	0.817
	(0.303)	(0.412)	(0.318)	(0.477)	(0.321)	(0.396)
Non-Supportive Foreign Military Presence	0.970	2.327***	0.966	2.420***	1.075	1.931**
	(0.110)	(0.533)	(0.114)	(0.550)	(0.119)	(0.402)
Leader Irregular Entry	1.055	1.407			1.252	1.350
	(0.137)	(0.427)			(0.153)	(0.414)
X-Polity Score			1.010	0.971		
			(0.012)	(0.023)		
X-Polity Score Squared			0.998	1.006		
			(0.003)	(0.005)		
Log Aid from Democracies as Pct. of GDP	1.045	0.838**	1.049*	0.842**		
	(0.024)	(0.052)	(0.024)	(0.049)		
Log Aid from Autocracies as Pct. of GDP	0.985	0.988	0.984	0.991		
	(0.019)	(0.046)	(0.019)	(0.045)		
Intrastate Conflict	1.703***	0.965	1.691***	0.982	1.717***	0.975
	(0.217)	(0.335)	(0.218)	(0.340)	(0.220)	(0.301)
Regime Overthrow	1.192	0.282***	1.224	0.322***	1.224	0.348***
	(0.234)	(0.089)	(0.227)	(0.095)	(0.227)	(0.108)
Log of Population	1.107*	1.190	1.105*	1.200	1.105**	1.074
	(0.052)	(0.152)	(0.054)	(0.159)	(0.054)	(0.126)
Log of per capita GDP	0.735***	1.165	0.724***	1.146		
	(0.039)	(0.218)	(0.042)	(0.223)		
Military Expenditures as pct. GDP	1.333	1.263	1.596	1.139	1.697	1.138
	(1.224)	(1.993)	(1.447)	(1.730)	(1.423)	(1.699)
Log Excluded Ethnic Pop. as pct. of Total	1.013	0.902	1.005	0.897		
	(0.039)	(0.097)	(0.040)	(0.094)		
Log of Leader Group Pop. as Pct. of Included	1.030	1.374	1.032	1.336		
	(0.105)	(0.385)	(0.106)	(0.359)		
Ethnolinguistic Fractionalization					1.759**	0.764
					(0.340)	(0.370)
Relative Political Extraction	1.083	0.473*	1.070	0.428**	1.069	0.626
	(0.086)	(0.149)	(0.083)	(0.122)	(0.104)	(0.167)
Relative Political Reach	0.745	0.741	0.730	0.739	0.855	0.785
	(0.136)	(0.310)	(0.137)	(0.308)	(0.167)	(0.317)
PGM Dissolution	2.489***		2.430***		2.450***	
	(0.319)		(0.313)		(0.317)	
Constant	0.623	0.517	0.769	0.617	0.047***	1.491
	(0.361)	(0.797)	(0.486)	(0.877)	(0.020)	(2.444)
ρ		0.676		0.650		0.619
		(0.238)		(0.238)		(0.199)
Countries	120		120		127	
Observations (Country-Years)	3055	159	3055	159	3234	159

Note: Odds Ratios presented in lieu of coefficients. Carter and Signorino (2010) cubic polynomials included in each selection stage. Standard Errors clustered at the country level. * p<0.05.

Autocratic Regime Type and PGM Linkage Formation

The distinction presented by the POLITY measure and its squared form of regime type may not alone sufficiently capture variation in the effects of different autocratic regime types on the propensity for PGM linkage formation. Work on autocratic regimes has been able to classify regime types along four distinct paths: personalist, military, single party and monarchical (Geddes, 1999), with a time series data-set in existence to capture the presence of each regime type (Geddes et al., 2014). While there is no theoretical motivation to suggest that PGM formation should be more or less prevalent in authoritarian regimes of a particular type, the presence of a particular regime type could be a confound in the use of existing leader threat variables in predicting the formation of militias in systems that are more likely to experience coup threat, such as the potential that military regimes experience more coup threat than others and personalist regimes may be more likely to be overthrown by foreign forces. Moreover, differential effects have been found for autocratic regimes for other outcomes involving political violence, such as the use of domestic terrorism (Aksoy et al., 2012; Wilson and Piazza, 2013), which may suggest that some autocratic regime types experience more political violence phenomena than others. Thus, dummy variables for presence of a particular system are included in each of the main statistical tests from the main article.

Table XIII: Logistic Regression of Determinants of PGM Linkage Formation with Autocratic Regime Types

	(1)	(2)	(3)	(4)	(5)
Recent Coup Attempt	2.437* (0.895)	2.477* (0.916)	4.564*** (2.087)	2.539* (0.999)	4.661*** (2.081)
Non-Supportive Foreign Military Presence	1.009 (0.219)	0.993 (0.223)	0.897 (0.320)	0.959 (0.219)	0.835 (0.295)
Leader Irregular Entry	0.960 (0.211)		0.785 (0.307)	1.013 (0.222)	0.816 (0.324)
X-Polity Score		1.047 (0.032)			
X-Polity Score Squared		0.996 (0.006)			
Log Aid from Democracies as Pct. of GDP	1.079 (0.042)	1.086* (0.044)	1.128* (0.056)	1.083 (0.046)	1.123 (0.070)
Log Aid from Autocracies as Pct. of GDP	0.981 (0.036)	0.980 (0.036)	0.922 (0.051)	0.980 (0.037)	0.900 (0.054)
Intrastate Conflict	2.770*** (0.685)	2.698*** (0.672)		3.045*** (0.778)	
PGM Dissolution	5.695*** (1.336)	5.435*** (1.296)	12.338*** (5.733)	6.873*** (1.762)	17.610*** (9.471)
Regime Overthrow	1.831 (0.640)	1.821 (0.610)	2.305 (1.371)	1.733 (0.633)	3.367* (1.651)
Log of Population	1.164 (0.093)	1.162 (0.094)	1.242 (0.143)	1.190* (0.093)	1.326* (0.165)
Log of per capita GDP	0.628*** (0.064)	0.609*** (0.070)	0.514*** (0.079)	0.635*** (0.070)	0.482*** (0.079)
Military Expenditures as pct. GDP	3.276 (6.201)	6.259 (11.421)	6.825 (14.526)	4.511 (10.324)	57.355* (116.847)
Log Excluded Ethnic Pop. as pct. of Total	1.023 (0.072)	1.007 (0.071)	1.133 (0.084)	1.025 (0.076)	1.122 (0.097)
Log of Leader Group Pop. as Pct. of Included	1.038 (0.212)	1.064 (0.223)	0.855 (0.253)	1.016 (0.210)	0.784 (0.220)
Single-Party	1.113 (0.296)	1.272 (0.400)	1.284 (0.409)	1.157 (0.310)	1.531 (0.508)
Personalist	1.418 (0.385)	1.640 (0.558)	2.124 (0.884)	1.422 (0.381)	2.599* (1.023)
Military	1.055 (0.336)	1.195 (0.407)	2.115 (0.981)	1.137 (0.379)	3.400** (1.557)
Year Fixed Effects				✓	✓
Constant	0.167 (0.180)	0.205 (0.218)	0.188 (0.325)	0.200 (0.220)	0.132 (0.246)
Countries	147	147	144	147	144
Observations (Country-Years)	3611	3611	2908	3611	2665

Note: Odds Ratios presented in lieu of coefficients. Carter and Signorino (2010) cubic polynomials included in each model. Standard Errors clustered at the country level. Models 3 and 5 exclude cases with ongoing intrastate conflicts. * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$.

Table XIV: Probit-Probit Selection Model of Determinants of Identity PGM Linkage Formation with Autocratic Regime Types

	(1)		(2)		(3)	
	Any PGM	Identity PGM	Any PGM	Identity PGM	Any PGM	Identity PGM
Recent Coup Attempt	1.549*	1.272	1.555*	1.409	1.649**	1.148
	(0.287)	(0.538)	(0.291)	(0.654)	(0.310)	(0.474)
Non-Supportive Foreign Military Presence	0.992	2.174***	0.981	2.360***	1.052	1.952**
	(0.103)	(0.446)	(0.105)	(0.510)	(0.104)	(0.410)
Leader Irregular Entry	0.957	1.991*			1.035	1.807*
	(0.106)	(0.561)			(0.109)	(0.500)
X-Polity Score			1.023	0.968		
			(0.015)	(0.026)		
X-Polity Score Squared			0.998	0.999		
			(0.003)	(0.005)		
Log Aid from Democracies as Pct. of GDP	1.031	0.914	1.034	0.913		
	(0.019)	(0.062)	(0.020)	(0.061)		
Log Aid from Autocracies as Pct. of GDP	0.987	0.982	0.987	0.978		
	(0.017)	(0.040)	(0.017)	(0.040)		
Intrastate Conflict	1.723***	0.911	1.693***	1.012	1.755***	0.938
	(0.196)	(0.285)	(0.196)	(0.308)	(0.209)	(0.267)
Regime Overthrow	1.382	0.483*	1.369	0.600	1.469*	0.531*
	(0.244)	(0.158)	(0.233)	(0.191)	(0.253)	(0.166)
Log of Population	1.084*	1.144	1.084*	1.204	1.077*	1.106
	(0.041)	(0.112)	(0.041)	(0.126)	(0.035)	(0.101)
Log of per capita GDP	0.796***	1.211	0.788***	1.155		
	(0.040)	(0.173)	(0.179)	(0.045)		
Military Expenditures as pct. GDP	2.175	1.189	2.936	0.712	2.090	0.880
	(1.832)	(1.894)	(2.405)	(1.107)	(1.533)	(1.289)
Log Excluded Ethnic Pop. as pct. of Total	1.021	0.931	1.013	0.910	1.024	0.931
	(0.034)	(0.107)	(0.033)	(0.105)	(0.035)	(0.102)
Log of Leader Group Pop. as Pct. of Included	1.004	1.333	1.012	1.304	1.013	1.482
	(0.102)	(0.356)	(0.105)	(0.327)	(0.106)	(0.425)
Ethnolinguistic Fractionalization					1.724**	1.420
					(0.319)	(0.834)
Single-party	1.057	0.745	1.124	0.702	1.240	0.701
	(0.128)	(0.257)	(0.162)	(0.224)	(0.153)	(0.226)
Personalist	1.210	0.764	1.291	0.844	1.388**	0.752
	(0.153)	(0.218)	(0.207)	(0.293)	(0.161)	(0.229)
Military	1.058	0.380*	1.117	0.480	1.224	0.375*
	(0.159)	(0.144)	(0.181)	(0.185)	(0.189)	(0.149)
PGM Dissolution	2.694***		2.637***		2.513***	
	(0.330)		(0.333)		(0.313)	
Constant	0.322*	0.102	0.345*	0.108	0.045***	0.323
	(0.162)	(0.140)	(0.172)	(0.146)	(0.016)	(0.445)
ρ		0.761		0.762		0.806
		(0.210)		(0.223)		(0.231)
Countries	147		147		156	
Observations (Country-Years)	3611	177	3611	177	3605	177

Note: Odds Ratios presented in lieu of coefficients. Carter and Signorino (2010) cubic polynomials included in each selection stage. Standard Errors clustered at the country level. * p<0.05, ** p<0.01, *** p<0.001.

Tables XIII and XIV show results from the re-done analysis using data on regime type from Geddes et al. (2014). What is most striking about the findings is that the variable for monarchy must be dropped as monarchies never experience an PGM linkage formation onset in the data. While striking in how definitive the monarchy finding is, it is consistent with the main hypothesis of the paper as monarchies tend to be adept at using co-optation mechanisms to stay in power, while yielding a little to political opponents (Menaldo, 2012). Otherwise, the effects of autocratic regime type are fairly limited, with personalist and military regimes only more likely to develop PGM linkages outside of civil conflicts with a consistent effect, indicating some support for the initial intuition. However, the effect does not limit the strength of the main predictors of PGM linkage formation, indicating that the type of autocracy that is in power in a country does not confound the main theoretical effect from the article. In fact, the inclusion of autocratic regime types seems to add to the significance of the likelihood of leaders who gained power through irregular entry being more likely to form pro-government militia linkages, which becomes a consistently significant predictor in the selection stage of Table XIV.

PGMs and Human Rights Prosecutions

While aid as a percentage of GDP from either democracies or autocracies is used to proxy for pressure from international donors as a predictor of PGM incidence in studies by (Carey et al., 2015a,b), the measure is rather indirect and, given the potential for donor states bypassing national governments altogether in many developing countries (Dietrich, 2013), imprecise. Instead, the occurrence of actual prosecutions for human rights violations may signal the willingness of some state entities to prosecute human rights abuses and create incentives for violators to export abuses to pro-government militias. Thus, a measure of human rights prosecutions has the benefit of being a more direct measure of human rights related pressures on state leaders.

Kim (2012) devises a measure of human rights prosecutions by coding all “executive and/or judicial activities before, during, and resulting from criminal procedures brought against former state officials on charges of human rights violations.” The measure includes “indictments, arrests, extraditions, detentions, and trials for violations of core human rights by state officials.” The data relies on US Department of State Country Reports on Human Rights Practices and codes a prosecution as having taken place in a given year when a prosecution meets these. The data only includes countries that have experienced a democratic transition at some point between 1980 and 2006 and times that following those transitions. Transitions were coded using the POLITY IV index.

The limitation of the data creates a dilemma. To use only data on transitions would truncate the data to only look at democracies that have experienced a transition during the time period covered by the data (but are not necessarily experiencing a transition for their entire time of coverage), a somewhat arbitrary distinction that would eliminate nearly 75% of the observations in the main

Table XV: Rare Events Logistic Regression of Determinants of PGM Linkage Formation with Transition Human Rights Trials

	(1)	(2)	(3)
Recent Coup Attempt	2.510*	2.618*	2.547*
	(0.932)	(0.982)	(1.002)
Non-Supportive Foreign Military Presence	0.994	0.968	0.953
	(0.213)	(0.214)	(0.215)
Leader Irregular Entry	0.994	0.968	0.953
	(0.213)	(0.214)	(0.215)
X-Polity Score		1.031	
		(0.026)	
X-Polity Score Squared		0.994	
		(0.006)	
Log of Aid from Democracies as Pct. GDP	1.084*	1.090*	1.088*
	(0.042)	(0.044)	(0.044)
Log of Aid from Autocracies as Pct. GDP	0.982	0.980	0.982
	(0.036)	(0.036)	(0.037)
Intrastate Conflict	2.759***	2.710***	2.955***
	(0.664)	(0.657)	(0.733)
PGM Dissolution	5.682***	5.382***	6.400***
	(1.346)	(1.296)	(1.632)
Regime Overthrow	1.774	1.812	1.660
	(0.612)	(0.589)	(0.597)
Log of Population	1.160	1.164	1.181*
	(0.090)	(0.093)	(0.090)
Log of per capita GDP	0.624***	0.615***	0.634***
	(0.061)	(0.069)	(0.067)
Military Expenditures as pct. GDP	4.409	7.961	5.513
	(7.705)	(13.040)	(11.647)
Log of Excluded Ethnic Pop. at Pct. Total	1.008	0.990	1.009
	(0.073)	(0.075)	(0.076)
Log of Leader Group Pop. as Pct. of Included	0.992	1.006	0.979
	(0.194)	(0.199)	(0.193)
Transition Human Rights Prosecutions	0.538	0.502	0.467
	(0.524)	(0.492)	(0.441)
Year Fixed Effects			✓
Constant	0.207	0.258	0.262
	(0.196)	(0.276)	(0.254)
Countries	147	147	147
Observations (Country-Years)	3611	3611	3611

Note: Odds Ratios presented in lieu of coefficients. Carter and Signorino (2010) cubic polynomials included in each model. Standard Errors clustered at the country level. Model 3 excludes cases with ongoing intrastate conflicts. * p<0.05, ** p<0.01, *** p<0.001.

model. On the other hand, including a variable of human rights prosecutions after transitions in the main model may also introduce bias if it omits human rights prosecutions in non-transition cases that led to PGM linkage formations, thereby inappropriately marking them zero and biasing the result against rejecting the null hypothesis. The former approach, not presented here, does not reveal a significant effect of human rights prosecutions on PGM linkage formation. The latter approach is presented on Tables XV and XVI. The human rights prosecution variable is similarly not significant across all models. The main effects remain unchanged in terms of both magnitude and significance. Understandably, these results are imperfect, but they still suggest that human rights prosecutions have no effect on PGM linkage formation.

Table XVI: Probit-Probit Selection Model of Determinants of Identity PGM Linkage Formation with Transition Human Rights Trials

	(1)		(2)		(3)	
	Any PGM	Identity PGM	Any PGM	Identity PGM	Any PGM	Identity PGM
Recent Coup Attempt	1.583*	1.169	1.609*	1.298	1.695**	1.076
	(0.293)	(0.506)	(0.304)	(0.592)	(0.317)	(0.478)
Non-Supportive Foreign Military Presence	0.982	2.177***	0.968	2.294***	1.060	1.890**
	(0.101)	(0.463)	(0.103)	(0.505)	(0.101)	(0.387)
Leader Irregular Entry	1.001	1.605			1.130	1.470
	(0.119)	(0.442)			(0.124)	(0.431)
X-Polity Score			1.015	0.982		
			(0.012)	(0.026)		
X-Polity Score Squared			0.996	1.001		
			(0.003)	(0.005)		
Log Aid from Democracies as Pct. GDP	1.034	0.904	1.037	0.906	1.012	0.940
	(0.019)	(0.059)	(0.020)	(0.058)	(0.016)	(0.057)
Log Aid from Autocracies as Pct. GDP	0.987	0.987	0.985	0.984	1.003	0.979
	(0.017)	(0.041)	(0.017)	(0.041)	(0.017)	(0.042)
Intrastate Conflict	1.726***	0.940	1.703***	1.000	1.748***	0.999
	(0.194)	(0.287)	(0.194)	(0.302)	(0.202)	(0.294)
Regime Overthrow	1.354	0.484*	1.360	0.567	1.424*	0.535
	(0.241)	(0.163)	(0.227)	(0.177)	(0.247)	(0.176)
Log of Population	1.082*	1.140	1.085*	1.177	1.074*	1.152
	(0.040)	(0.115)	(0.041)	(0.128)	(0.032)	(0.132)
Log of per capita GDP	0.790***	1.250	0.786***	1.195		
	(0.038)	(0.177)	(0.178)	(0.044)		
Military Expenditures as pct. GDP	2.177	1.046	2.813	0.659	1.983	1.616
	(1.722)	(1.819)	(2.126)	(1.133)	(1.371)	(2.809)
Log of Excluded Ethnic Pop. at Pct. Total	1.014	0.934	1.004	0.912		
	(0.035)	(0.103)	(0.036)	(0.103)		
Log of Leader Group Pop. as Pct. of Included	0.988	1.224	0.992	1.206		
	(0.097)	(0.318)	(0.098)	(0.298)		
Transition Human Rights Prosecutions	0.650	1.134	0.628	0.982	0.635	1.197
	(0.298)	(0.315)	(0.292)	(0.284)	(0.374)	(0.285)
Ethnolinguistic Fractionalization					1.791**	0.891
					(0.317)	(0.441)
PGM Dissolution	2.667***		2.597***		2.537***	
	(0.330)		(0.327)		(0.317)	
Constant	0.368*	0.082	0.402	0.098	0.051***	0.300
	(0.168)	(0.110)	(0.203)	(0.132)	(0.017)	(0.450)
ρ		0.826		0.811		0.795
		(0.241)		(0.244)		(0.222)
Countries	148		148		156	
Observations (Country-Years)	3611	177	3611	177	3835	177

Note: Odds Ratios presented in lieu of coefficients. Carter and Signorino (2010) cubic polynomials included in each selection stage. Standard Errors clustered at the country level. * p<0.05,

** p<0.01, *** p<0.001.

PGMs and Leaders' Actual Political Survival

The main article's explanation for pro-government militia linkage formation hinges on leader's fear of potential removal by either internal or external forces. While not necessary for validation of the theory, it can be shown that leader's actual survival after deposition is improved by the presence of a pro-government militia as a way of adding validity to the presence of such a perception. The specific implication of the theory is that the presence of pro-government militias would make leaders more likely to remain politically active, either through leading an insurgency or at least having a say in the post-government situation, if leaders possessed linkages to at least one pro-government militia at the time of their overthrow. The distinction of being active in the country's political processes underlies the presumed benefit of pro-government militias in giving leaders an alternative avenue for maintaining power at the risk of irregular removal. Leaders that are killed, jailed or forced into either exile or retirement after an overthrow¹⁶ are no longer active in a country's politics.

Data on the time when leaders were removed from power was obtained from two sources: the Archigos data-set (Goemans et al., 2009) and Svoboda and Akcinarioglu (2006)'s data on autocratic leader exit. Combined, information about the fate of leaders irregularly removed from office¹⁷ was gathered through LexisNexis searches of the leader's name by the author. After finding each leader's specific leader fate, the outcomes were coded dichotomously on whether deposed leaders were able to influence their country's politics in some capacity after having been removed from office. Influence, under this definition, could include leading an insurgency against the new leadership or continuing to participate in electoral politics. Leaders that were forced into exile, to

¹⁶Leaders that are assassinated without a larger plot to depose their regime are not included in the analysis.

¹⁷Once again, "outside of prevailing rules, provisions, conventions and norms of a country," as per the Archigos data-set.

explicitly retire from politics, were jailed or assassinated were considered to not have influence. Table XVII shows a cross-tabulation of leader's political involvement. While the majority of leaders that exited power did so permanently, the majority of leaders that retained influence, either through continuing conflict or within electoral politics, did so while holding existing linkages to pro-government militias.

Table XVII: Leader Fate and Pro-government militias			
	No Active PGM	Active PGM	Total
Out of Politics	52	40	92
Active in Politics	5	13	18
Total	57	53	110

Note: Fisher's exact test (2-sided) = 0.038.

Bivariate and multivariate tests were carried out next using some leader-specific and national characteristics as potential predictors of influence. It was expected that leaders from the military, those deposed in coups would be less likely to have extra-institutional backing and remain politically active, while those deposed by a foreign state, in semi-democracies, during a civil war and in more ethnically diverse societies would have more likelihood of extra-institutional backing and be more likely to remain in power. Table XVIII shows results from a logistic regression. While the standard errors are quite high, linkage to a PGM is the only significant (mostly at $p < 0.05$) predictor of post-removal political influence. The effect is substantial, with an over 200% gain in the likelihood of retaining influence with a pro-government militia linkage at the time of removal. The results indicate that, while overall political survival is rare, leaders stand the best chance of retaining influence and even potentially winning back their position through pre-removal linkages to a pro-government militia.

Table XVIII: Logistic Regression of Determinants of Leader's Political Involvement after Removal

	(1)	(2)	(3)	(4)
Active PGM in Removal Year	3.380*	3.741*	3.380*	3.741*
	(1.915)	(2.581)	(1.960)	(2.298)
Ethnolinguistic Fractionalization		3.310		3.310
		(3.615)		(3.315)
Military Leader		0.403		0.403
		(0.281)		(0.330)
Civil War		0.963		0.963
		(0.651)		(0.554)
Deposed by Coup		0.492		0.492
		(0.303)		(0.308)
Deposed by Foreign State		3.856		3.856*
		(3.659)		(3.104)
X-Polity Score Squared		1.014		1.014
		(0.017)		(0.018)
Constant	0.096**	0.057**	0.096**	0.057**
	(0.045)	(0.059)	(0.044)	(0.059)
Country-Clustered Standard Errors			✓	✓
Observations	110	105	110	105

Note: Odds Ratios presented in lieu of coefficients * p<0.1.

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